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ABSTRACT

These proceedings and addendum contain 31 papers: "Linking Motivation and Participation in Adult Education" (Babchuk, Courtney); "Workplace Literacy Education as Contextual Learning" (Babchuk, Dirkx); "Model for Focusing Research in Adult Agricultural Education" (Birkenholz et al.); "A Research Agenda for Adult Civic Education" (Boggs, Stubblefield); "A Comparison of Adult Baccalaureate Graduates and Nonpersisters" (Christensen); "Ways of Doing" (Courtney); "Homelessness and Work Experience" (Davis); "Boundary Awareness in Tutor-Student Relationships" (Dirkx, Fonfara, Flaska); "Understanding and Facilitating Experience-Based Learning in Adult Education" (Dirkx, Lavin); "Adult Development" (Ferro); "Volunteer Issues and Trends Survey in the 1990s" (Hanson-Stone); "Extension Education" (Hutchins); "Barriers to Education as Perceived by Adult Students and Administrators in Minnesota Community Colleges and Technical Colleges" (Larson); "Learning Strategies Concerns among ABE [Adult Basic Education] Practitioners" (Martin, Fisher); "The Great Tradition Revisited" (Morris); "In Their Own Voices" (Reif); "Threats and Promises" (Schultz, Sparks); "Effectiveness, Cost, and Cost-Effectiveness of Education To Achieve Health Goals" (Splett); "Correlating the High School Tests of General Education Development and the Official GED Practice Test" (Stewart); "Educational Orientation and Job Satisfaction" (Suvedi); "Knowledge Structures Underlying Real World Practice" (Thomas, Englund); "An Investigation of the Relationship between Self-Directed Learning Projects and Progress toward Individuation" (Wilson, Knapp); "Adult Mathematics Learning" (Wolfe); "Teaching toward Self-Directedness" (Ellis); "Issues for Non-Traditional Undergraduate Students Living in Traditional College and University Residence Halls" (Herr); "Practitioner Conducted Evaluation Studies" (Jazwiec); "Identifying Critical Factors of Quality" (Kersten); "Putting Behavior in Performance Goals" (Lynn); "Reaching for the Future" (Sandmann); and "Conducting Evaluation in Adult Literacy Programs" (Turner). (KC)

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UNIVERSITY OF MINNESOTA

The Tenth Annual

Midwest Research-to-Practice Conference

A Conference in Adult Continuing and Community Education

October 3 - 4, 1991
Earle Brown Continuing Education Center
University of Minnesota
St. Paul, Minnesota

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Conference Proceedings

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October 2, 1991

Dear Research to Practice Conference Participant:

Welcome to the *Tenth Annual Midwest Research-to-Practice Conference in Adult, Continuing and Community Education* and to the University of Minnesota.

Ten years ago, a group of practitioners and researchers from the region had the wisdom to meet and to begin discussing practices, concepts, evaluation, and research studies in order to improve the practice in adult education. A decade later, we are continuing this discussion at the site of a major urban land grant university.

The steering committee and local arrangements committee have worked diligently to provide general, concurrent, and invited topic sessions that are contemporary, provocative, and most importantly, continuing to explore the linkage of practice and research in our field. The researchers and practitioners have also worked hard to bring us quality papers. We extend our deep appreciation to these committees, the writers, and the co-hosts, as well as the cooperating groups who helped sponsor all aspects of this conference.

Two features were added to the conference. First, to take advantage of the metropolitan setting for this conference, site visits will be offered in order to show research and practice actually occurring in business and in an adult education setting. Additionally, a symposium exploring the state of research and practice inquiry, as represented by the papers, will be presented.

As you attend the sessions, read others in this publication, and interact with colleagues at the conference, we hope you are stimulated to continue the growth of both research and practice in the field for years to come.

Enjoy the conference, the campus, and a few of the 10,000 lakes.

Best regards,

Charles Bruning
Conference Co-Chair

Lorilee R. Sandmann
Conference Co-Chair

MISSION STATEMENT

MIDWEST RESEARCH-TO-PRACTICE CONFERENCE IN ADULT, CONTINUING AND COMMUNITY EDUCATION

The conference provides a forum for practitioners and researchers to meet and discuss practices, concepts, evaluation and research studies and related issues in order to improve practice in adult education. It encourages, fosters and facilitates dialogue and the initiation and pursuit of projects among individuals and groups working in the various fields of adult education. Through such discussion and collaboration participants contribute toward the realization of a more humane and just society through lifelong learning.

Prepared on behalf of Midwest Research-to-Practice Conference
Steering Committee

By Boyd Rossing
May 28, 1991

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PROGRAM

MIDWEST RESEARCH-TO-PRACTICE
IN ADULT, CONTINUING AND COMMUNITY EDUCATION CONFERENCE

October 3 - 4, 1991
St. Paul, Minnesota

Wednesday, October 2, 1991

6:00 to 9:00 PM — **Conference Registration**

7:00 to 9:00 PM — **Minnesota Hospitality: Pre-Conference Reception**
Minneapolis Metrodome Hilton Hotel

Thursday, October 3, 1991

EARLE BROWN CENTER

8:30 to 9:00 AM — **Registration, First Floor**

9:00 to 10:15 AM — **Opening of General Session, Room 42**

Welcome
Lorilee Sandmann, Michigan State University

Greetings
Gail Skinner, Minnesota Extension Service
University of Minnesota
Hal Miller, Continuing Education and Extension
University of Minnesota
Dale Lange, College of Education
University of Minnesota

Speaker
Michael Patton, Union Institute Graduate School
"The Research-Practice Linkage: Where All the Findings are Above Average"

Ten Year Anniversary Celebration

10:15 to 10:45 AM — **Break**

10:45 to 11:45 AM — **Session I**

Room 42 — **Dennis R. Davis**, Center for Youth Employment and Training. HOMELESSNESS AND WORK EXPERIENCE: THE RESULTS FROM SAINT PAUL.

Room 32 — **John M. Dirkx**, University of Nebraska, **Tedda Fonfara and Kay Flaska**, Southeast Community College. BOUNDARY AWARENESS IN TUTOR-STUDENT RELATIONSHIPS: A PROBLEM FOR RESEARCH-TO-PRACTICE FRAMEWORKS.

Room 52 — **Larry G. Martin and James Fisher**, University of Wisconsin-Milwaukee. LEARNING STRATEGIES CONCERNS AMONG ABE PRACTITIONERS.

Room 156 — **Patricia L. Splett**, University of Minnesota. EFFECTIVENESS, COST, AND COST-EFFECTIVENESS OF EDUCATION TO ACHIEVE HEALTH GOALS.

Room 166 — **Lillian H. Stewart**, Army Continuing Education System. CORRELATING THE HIGH SCHOOL TESTS OF GENERAL EDUCATION DEVELOPMENT AND THE OFFICIAL GED PRACTICE TEST.

12:00 to 1:15 PM — **Presidents' Luncheon, Belgian Dining Room**

Introductions
Susan Rydell, Metropolitan State University

Institutional and Association Presidents
Tobin G. Barrozo, President
Metropolitan State University
John Fredericksen, President
Minnesota Community Education Association
Victor Klimoski, President
Minnesota Association for Continuing Adult Education

1:30 to 2:30 PM — **Session II**

Room 42 — **Sean Courtney**, University of Nebraska. WAYS OF DOING: MOTIVATION, PERSONAL CHANGE AND THE DIFFUSION OF KNOWLEDGE.

Room 32 — **Trenton R. Ferro**, Indiana University of Pennsylvania. ADULT DEVELOPMENT: AN INTEGRATIVE MODEL FOR PRACTICE.

Room 52 — **Gregory K. Hutchins**, University of Minnesota. EXTENSION EDUCATION: IMPACTING PUBLIC POLICY.

Room 156 — **Mark L. Larson**, University of Minnesota. BARRIERS TO EDUCATION AS PERCEIVED BY ADULT STUDENTS AND ADMINISTRATORS IN MINNESOTA COMMUNITY COLLEGES AND TECHNICAL COLLEGES.

Room 166	**Margaret T. Reif**, University of St. Thomas. IN THEIR OWN VOICES: ADULT LEARNERS ON WRITING A STUDY OF NONTRADITIONAL GRADUATE STUDENTS' STORIES ABOUT WRITING.
2:30 to 2:45 PM	**Break**
2:30 to 4:15 PM	**Optional Site Visit - Technology for Learning Center**
2:45 to 3:45 PM	**Session III**
Room 42	**Roger Morris**, University of Technology, Sydney, Australia. THE GREAT TRADITION REVISITED: A REVISIONIST VIEW OF THE HISTORY OF ADULT EDUCATION IN AUSTRALIA.
Room 32	**Barbara Sparks and Duane E. Schultz**, University of Wisconsin-Milwaukee. THREATS AND PROMISES: WORKER VIEWS AND IDEOLOGY OF EDUCATION AND LEARNING.
Room 52	**Murari Suvedi**, Michigan State University. EDUCATIONAL ORIENTATION AND JOB SATISFACTION: A STUDY OF EXTENSION AGENTS AND THEIR SUPERVISORS.
Room 156	**Fancher E. Wolfe**, Metropolitan State University. ADULT MATHEMATICS LEARNING: CONCERNS FROM A PRACTITIONER'S POINT OF VIEW.
3:45 to 4:00 PM	**Break**
4:00 to 5:00 PM	**Session IV**
Room 42	**Wayne Babchuk and John Dirkx**, University of Nebraska. WORKPLACE LITERACY EDUCATION AS CONTEXTUAL LEARNING: PROMISE, PERFORMANCE AND PROBLEMS.
Room 32	**Robert J. Birkenholz**, University of Missouri-Columbia, **Steven R. Harbstreit**, Kansas State University, **Dale A. Law**, University of Illinois, **Robert A. Martin**, Iowa State University, and **Edgar Persons**, University of Minnesota. MODEL FOR FOCUSING RESEARCH IN ADULT AGRICULTURAL EDUCATION.
Room 52	**Pauline Christensen**, Winona State University. A COMPARISON OF ADULT BACCALAUREATE GRADUATES AND NONPERSISTERS.
Room 156	**Ruth G. Thomas and Michelle Englund**, University of Minnesota. KNOWLEDGE STRUCTURES UNDERLYING REAL WORLD PRACTICE: IMPLICATIONS FOR ADULT EDUCATION.
Room 166	**John P. Wilson and Mary Elizabeth Knapp**, Iowa State University. AN INVESTIGATION OF THE RELATIONSHIP BETWEEN SELF-DIRECTED LEARNING PROJECTS AND PROGRESS TOWARD INDIVIDUATION.

5:00 to 6:30 PM — **Reception & Information Fair - Lounge, First Floor**
Music by **Mark Larson**, University of Minnesota
Sponsored by MVAEA, MCEA, MACAE, ASTD

Dinner on Your Own (sign up)

Friday, October 4, 1991

EARLE BROWN CENTER

8:00 to 9:00 AM — **Steering Committee Meeting, Room 42**

8:30 AM — **Coffee and Hospitality**

8:30 to 10:30 AM — **Optional Site Visit - 3M Information Systems and Data Processing (IS & DP) Educational Services**

9:00 to 10:00 AM — **Session V**

Room 42 — **Wayne Babchuk and Sean Courtney**, University of Nebraska. LINKING MOTIVATION AND PARTICIPATION IN ADULT EDUCATION: THE PERSONAL INFLUENCE HYPOTHESIS.

Room 32 — **David L. Boggs**, Ohio State University and **Harold W. Stubblefield**, Virginia Polytechnic Institute and State University. A RESEARCH AGENDA FOR ADULT CIVIC EDUCATION.

Room 52 — **John M. Dirkx**, University of Nebraska and **Ruth Lavin**, Nebraska Equity Institute. UNDERSTANDING AND FACILITATING EXPERIENCE-BASED LEARNING IN ADULT EDUCATION: THE FOURthought MODEL.

Room 156 — **JoAnn Hanson-Stone**, Metropolitan State University. VOLUNTEER ISSUES AND TRENDS SURVEY IN THE 1990'S: PRIORITIES FOR THE PRACTICE OF VOLUNTEER ADMINISTRATION.

10:00 to 10:30 AM — **Break**

10:30 to 11:15 AM — **Invited Symposium - Research to Practice: Implications of the 1991 Midwest Research to Practice Conference, Room 42**

Daniel Abebe, Metropolitan State University
Helene Johnson, Government Training Service
Larry Martin, University of Wisconsin - Milwaukee
Sara Steele, University of Wisconsin - Madison
James Stone, Moderator, University of Minnesota

11:30 to 1:00 PM

Luncheon, Belgian Dining Room

Presider

Charles Bruning, University of Minnesota

Introduction

Nils Hasselmo, President, University of Minnesota

Speaker

Reatha Clark King, President and Executive Director, General Mills Foundation

"E...cation for Excellence in Service to Society: The Critical Issue for Research and Practice in Adult Education Today and Into the 21st Century"

Student Awards Presentation

Farewell

Patrick J. Borich, Director
Minnesota Extension Service
University of Minnesota

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LINKING MOTIVATION AND PARTICIPATION IN ADULT EDUCATION: THE PERSONAL INFLUENCE HYPOTHESIS

Wayne A. Babchuk and Sean Courtney[1]

ABSTRACT. The relationship between the individual's underlying motive to participate in adult education programs and the act of participation itself has not been clearly established in spite of a long tradition of research directed at motivation and learning in adult education. It is proposed that the effects of personal influence on participatory behavior is a necessary element in the equation linking motivation and participation. This thesis is consistent with research on personal influence from the fields of Sociology and Adult Education, and is further supported by findings from several ongoing research projects described in this study. Personal influence, when viewed as a critical intervening variable between motivation and participation, has far reaching implications for issues concerning both researchers and practitioners in such areas as recruitment, retention, and instruction of the adult learner.

INTRODUCTION

Early research directed at identifying the major variables associated with participation in adult and continuing education focused primarily on the analysis of demographic factors and their effect on participatory behavior via the use of descriptive data-collection techniques. Cognizant of the limitations this approach, a number of researchers began to evoke psychological or social-psychological explanations to account for differences in rates of participation among individuals. Whereas these explanations vary in their use of relatively simple unidimensional models of cause and effect to highly complex multicausal "composite" models of participation, most view the individual's motive to participate in adult education programs as central to the decision making process. Yet in spite of this emphasis, the relationship between the individual's motive to participate and the actual act of participation has not been clearly established.

The purpose of this study is to examine the effects of personal influence on participatory behavior. It is proposed that personal influence is a key element linking motivation and participation in adult education programs, regardless of setting. This hypothesis is supported by research in sociology regarding factors pertaining to membership in voluntary associations, and is consistent with previous research in adult education concerning the effects of personal influence on participation. In addition, unpublished data will be presented which provides strong support for the Personal Influence Hypothesis. This approach has profound implications for the design and implementation of adult education programs, and is particularly relevant to recruitment strategies targeted at typically hard-to-reach adults.

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Presented at The Midwest Research-to-Practice Conference, St. Paul, MN, October 3-4, 1991.

SOCIAL PARTICIPATION

For over 30 years, researchers in sociology and adult education have examined the phenomenon of social participation in its various forms. These include, among others, membership in voluntary associations and participation in adult education programs. Historically, a number of these researchers have argued either implicitly or explicitly that these two forms of social participation are closely related subsets of general participatory behavior. For example, Verner and Newberry (1958) stressed that participation in organized adult education programs must be viewed in conjunction with other forms of organized social life due to the observation that participation in one activity is related to participation in all other activities. This theme was echoed by London et al. (1963), who stressed the interrelatedness of different forms of social participation and introduced the term "general participation syndrome" to describe the observed tendency of individuals to participate in multiple organizations and settings. Booth (1964), specifically outlined similarities between membership in voluntary associations and participation in adult education programs, as does Courtney (1992). Smith et al. (1980) argued that participation in different formally organized activities is significantly and positively correlated, and called this phenomenon "simultaneous role linkage." These researchers also coined the term "sequential role linkage" to refer to the probability that participation in one type of organization leads to future involvement in another. Somewhat later, Cookson (1986) stressed the importance of examining participation in adult education programs in relation to other forms of social participation.

In a study of the participatory behavior of 1500 adults, Knox and Videbeck (1963) provided support for the notion that different types of social participation are highly correlated, and showed that individuals with similar status configurations (measured by the interrelationship of a cluster of sociodemographic variables) are more likely to participate in adult education programs and belong to voluntary associations than those individuals with different status configurations. Finally, Kobberdahl (1970), in his study of 66 participants in an ABE program and 33 non-participants, found that 77.2 percent of the participants belonged to one or more voluntary associations while only 39.4 percent of the non-participants reported membership in these organizations.

Taken together, these findings underscore the notion that membership in voluntary associations and participation in adult education programs are closely related forms of social participation. Given this affinity, many of the principles of membership in voluntary associations appear to apply to participation in adult education as well. In particular, one of these principles, personal influence, holds considerable predictive power in explaining both membership in voluntary organizations and participation in adult education programs.

THE PERSONAL INFLUENCE HYPOTHESIS

Pioneering research on personal influence centered on the flow of information from the mass media to the individual via primary group networks and the effect this communication process has on individual decision making and opinion formation in such areas as political opinions and voting and consumer behavior (Lazarsfeld et al. 1948; Katz and Lazarsfeld 1955). As such, personal influence was conceptualized as a process by which individuals both obtain and utilize information in the decision making process. Following this lead, several researchers have examined the effect of personal influence on membership in voluntary associations and participation in adult education programs.

PERSONAL INFLUENCE AND VOLUNTARY ASSOCIATIONS

With regard to voluntary association membership, researchers have focused primarily on the role of personal influence in the individual's decision to participate in such organizations. Sills (1957) reported that 90 percent of the members interviewed stated that face-to-face interaction was the primary means by which they decided to join an organization, while Babchuk and Gordon (1962) concluded that personal interaction accounted for 50 to 79 percent of the decisions to join voluntary associations. In the Babchuk and Gordon study, the term personal influence was introduced in the voluntary association literature and was originally limited to describe the effects of personal interaction on joiners by primary group members and other influentials where face-to-face familiarity was implied. Other individuals such as professional community organizers, social workers, priests, and other persons "acting in an institutionally-defined capacity" (Babchuk and Gordon 1962: 3) were excluded because the researchers considered these contacts to be a form of "impersonal" influence. Nonetheless, personal influence accounted for more memberships than impersonal influence in all associations studied.

Interestingly, in subsequent studies by Booth and Knox (1967), and Booth and Babchuk (1969), these categories were collapsed under the rubric of personal influence, defined as "a relationship involving two or more persons in a social system where communication occurs in a face-to-face exchange which results in changed behavior on the part of the receiver" (Merton 1957, cited in Booth 1966: 2). Booth, Knox, and Babchuk's decision to incorporate primary group members (informal opinion leaders) as well as other influentials (formal opinion leaders) represented a point of departure from previous research on personal influence which implicitly excluded the latter type of social interaction. These researchers felt that this expanded definition of personal influence would allow for a more thorough analysis of the decision making process associated with membership in voluntary associations. This will be the rationale guiding the notion of personal influences as it pertains to participation in adult education programs in the present inquiry as well.

Reconceptualized in this manner, personal influence accounted for 75 to 84 percent of the decisions to participate in the voluntary associations studied by Babchuk and Gordon (1962). In the Booth and Babchuk (1969) study, 77 percent of the respondents reported that personal influence was the primary factor associated with their affiliation in these groups. Of these, almost twice as many joiners cited primary group members (friends and family) than other opinion leaders or influentials, with close friends identified over three times as often as relatives. Somewhat surprisingly, not one individual in the sample reported that he or she became a member of an association solely on the basis of mass media message, although 38 percent of the respondents who cited personal influence as the most important factor in their decision to join these groups also reported that mass media sources of information played a significant role in the decision making process. Also worth noting, joiners most often cited more than one individual as influential in their decision to become members. Similarly, Kobberdahl (1970) found that over 74 percent of participants became involved in voluntary associations through contact with friends and family, while the media category (e.g., television, radio, newspapers, and other promotional materials) accounted for less than six percent of the memberships. If personal influence is extended in this study to include face-to-face contact with employers, over 88 percent of the joiners became affiliated in this manner.

PERSONAL INFLUENCE AND ADULT EDUCATION

For the most part, researchers in adult education have stressed the role of personal influence in becoming aware of adult education programs. Damon (1960) reported that word-of-mouth was the single most cited source of obtaining information regarding adult education programs among 2,591 participants in 28

locations throughout California. On the basis of this inquiry, he concluded that contact with a satisfied student or friend was the single best means of recruiting new students. In a similar vein, Kobberdahl (1970) found that 47 percent of the participants in an ABE program reported that they initially became aware of this program through direct personal contact with friends and family (47 percent). It should be noted, however, that an additional 30 percent became aware of the program through personal interaction with their employer or because of a contact with a teacher or other individual connected to the ABE program. Thus, approximately 77 percent cited personal influence as the means by which they initially became exposed to this program according to the criteria established by Booth and Knox (1967) and Booth and Babchuk (1969) described above.

In a study which examined the effect of personal influence on an individual's decision to participate in adult education programs, Booth and Knox (1967) reported that face-to-face contact was more important than mass media sources in the decision making process. These researchers also found that friends, professional counselors, or teachers were the individuals who most often influenced the participant's decision to become involved in adult education programs. Unfortunately, Booth and Knox do not present any data in this article. Finally, Snyder (1971) found that 90 percent of the participants in ABE courses had become aware of and had been motivated to attend these courses as a result of personal contact. Contrary to previous reports on the effects of personal influence, recruiters played a more important role than friends and family (46 percent to 19 percent, respectively) in attracting potential learners (cited in Irish 1980).

These findings receive additional support from several ongoing research projects at our institution. In a study of 2,323 students enrolled ABE programs from 1988-1990, the most frequently reported means by which participants became aware of the program was through contact with friends (45.4 percent). The second and fourth most cited categories, high school or college counselor (17.9 percent) and instructor (7.5 percent), also constitute forms of personal influence (see Table 1). Together, these categories account for 71 percent of the responses and serve to illustrate the importance of personal influence in the process of becoming aware of an adult education program. It is also significant that more traditional mass media sources of information (i.e., radio, newspaper, television, and brochures) account for only 6.8 percent of the responses.

Table 1. How Participants Became Aware of ABE Program

Category	Number	Percent
Friends	1055	45.4
Instructor	174	7.5
Educational Institution	378	16.3
Radio	15	0.6
Newspaper	104	4.5
Television	37	1.6
Agency	115	5.0
High School/College Counselor	415	17.9
Brochures	2	0.1

In another recent study of adult education re-entry students in a small liberal arts college, 25 of 32 participants (78 percent) reported becoming aware of the program by word of mouth rather than through other sources. Finally, in a separate qualitative study of adults involved in personal change processes, the influence of significant others (i.e., family and friends) appears to be critical in predicting the likelihood of learning "by supporting" the motivational structure within which the individual is operating. (See Courtney in these proceedings.)

These data provide strong evidence that personal influence is the primary means by which individuals become aware of adult education programs. On the basis of this research, it seems likely that personal influence plays a critical role in the individual's decision to participate in these programs as well. Together with the research conducted by Damon (1960), Booth and Knox (1967), Kobberdahl (1970), and Snyder (1971) on participation in adult education programs, and the work of Sills (1957), Babchuk and Gordon (1962), Booth and Babchuk (1969), and Kobberdahl (1970) on voluntary association membership, these findings underscore the importance of personal influence on participatory behavior and provide preliminary support for what is referred to herein as the Personal Influence Hypothesis. In a nutshell, the Personal Influence Hypothesis specifies that social interaction via face-to-face contact with primary group members and other influentials is the critical intervening variable needed to link motivation and participation in adult education programs.

CONCLUSIONS AND IMPLICATIONS

The Personal Influence Hypothesis is consistent with a number of issues important to research and practice in adult education. For example, on the basis of their extensive review of the literature, Anderson and Niemi (1969) conclude that personal communication is a vastly superior means of reaching the educationally disadvantaged adult than mass media sources of information. That is, they believe that participation among these individuals is accomplished primarily through face-to-face communication within the context of primary group relationships involving small kinship and friendship groups. Accordingly, Fingeret (1983) stresses the importance of "face-to-face interaction" (p. 135) in her study of coping strategies of illiterate adults, suggesting that an appreciation of an individual's social network should be incorporated in program and instructional design. Furthermore, she calls for more research on the effect of social networks on enrollment practices in literacy programs. Cross (1981) argues that it is a "well-known fact" (p. 140) that word-of-mouth recruitment techniques are the single most effective means of increasing participation in adult education programs. Given this assumption, she suggests that educators can encourage participation by sponsoring "each-one-bring-one nights," and by tapping the support of participants' significant others. In addition, Cross believes that establishing contact with voluntary associations and other groups in which target persons are members may be a particularly effective recruitment technique. Similarly, Beder (1980) emphasizes the success of personal contact via face-to-face interaction in the recruitment of ABE students and suggests that educators should establish reciprocal relationships between agencies and organizations which have traditionally been successful in reaching disadvantaged adults. Finally, Irish (1980) concludes that mass media sources of information are "not particularly effective" (p. 46) for reaching the educationally disadvantaged. Instead, she recommends direct personal recruitment in the form of door-to-door canvassing and word-of-mouth techniques.

There are two major issues or assumptions fundamental to the study of participatory behavior in adult education that remain unresolved (Courtney 1992). The first of these regards the observation that adult education programs are not providing educational services to those who appear to need it the most. The second issue concerns the failure to establish any clearcut link between motivation and participation in adult education programs in spite of a long tradition of research directed at motivation and learning. The

Personal Influence Hypothesis may play an important role in resolving both of these dilemmas. In effect, it may afford a crucial perspective on research and practice, specifically in understanding what educational programs designed for a variety of clientele (e.g. from the middle class older adult to the "hard-to-reach" city dweller) have in common. If personal influence factors prove to be the common denominator, they will have far reaching implications for issues concerning both researchers and practitioners in such areas as recruitment, retention, and instruction of the adult learner.

LITERATURE CITED

Anderson, D., and Niemi, J.A. (1969). Adult Education and the Disadvantaged Adult. Syracuse, New York: Syracuse University Publications in Continuing Education.

Babchuk, N., and Gordon, C.W. (1962). The Voluntary Association in the Slum. Lincoln, NE: University of Nebraska Press.

Booth, A. (1964). Voluntary Association Membership and Participation in Adult Education. University of Nebraska: An Unpublished Report Presented to the Social Participation Session of the Midwest Sociological Society Meeting, Kansas City, April 1964.

Booth, A. (1966). Personal Influence on the Decision to Join Voluntary Associations. Ph.D. diss., University of Nebraska.

Booth, A., and Babchuk, N. (1969). Personal Influence Networks and Voluntary Association Affiliation. Sociological Inquiry, 39, 179-188.

Booth, A., and Knox, A.B. (1967). Participation in Adult Education Agencies and Personal Influence. Sociology of Education, XL, 275-277.

Cookson, P.S. (1986). A Framework For Theory and Research on Adult Education Participation. Adult Education Quarterly, 36(3), 130-141.

Courtney, S. (1992). Why Adults Learn: Toward a Theory of Participation in Adult Education. London: Rutledge.

Cross, K.P. (1981). Adults as Learners. San Francisco: Jossey-Bass.

Damon, T.F. (1960). Publicizing Local Programs of Adult Education. Adult Education, 10, 144-145.

Fingeret, A. (1983). Social Network: A New Perspective on Independence and Illiterate Adults. Adult Education Quarterly, 33(3), 133-146.

Irish, G.H. (1980). Reaching the Least Educated Adult. In G.G Darkenwald and G.A. Larson, (eds.), Reaching Hard-to-Reach Adults. New Directions for Continuing Education no 8. San Francisco: Jossey-Bass.

Katz, E., and Lazarsfeld, P.F. (1955). Personal Influence: The Part Played by People in the Flow of Mass Communication. Glencoe, Ill: The Free Press.

Knox, A.B., and Videbeck, R. (1963). Adult Education and Adult Life Cycle. Adult Education, 13, 102-121.

Kobberdahl, W.C. (1970). Adult Basic Education: Participation and Non-Participation. Ph.D. diss., University of Nebraska.

Lazarsfeld, P.F., Berelson, B., and Gaudet, H. (1948). The People's Choice. New York: Columbia University Press.

London, J., Wenkert, R., and Hagstrom, W. (1963). Adult Education and Social Class. University of California: Berkeley.

Merton, R.K. (1957). Social Theory and Social Structure. Glencoe, Ill: The Free Press.

Sills, D. (1957). The Volunteers: Means and Ends in a National Organization. Glencoe, Ill: The Free Press.

Smith, D.H., Macaulay, J. and Associates. (1980). Participation in Social and Political Activities. San Francisco: Jossey-Bass.

Verner, C., and Newberry, J.S. (1958). The Nature of Adult Participation. Adult Education, 8, 208-222.

WORKPLACE LITERACY EDUCATION AS CONTEXTUAL LEARNING: PROMISE, PERFORMANCE AND PROBLEMS

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ABSTRACT. Workplace literacy programs grounded in a contextual view of learning emphasize the utilization of material and content that is relevant and useful to the learners within the framework of specific job tasks. Yet in spite of this emphasis, fundamentally different conceptions of what is meant by contextual learning have been used as the basis for the design and implementation of workplace literacy programs. This inquiry assesses the effectiveness of these various forms of contextual learning, and serves to introduce a model built upon existing frameworks that take into account the interests and needs of adult workers. This approach, labeled the Reciprocal Model of Workplace Basic Skills Education, stresses the interrelationship between the basic skills requirements of jobs performed by workers and the needs of the workers-as-learners, as well as the goals and objectives of employers related to performance and productivity. It is argued that the Reciprocal Model of Workplace Basic Skills Education is not only consistent with current views in adult education regarding the nature of adult learning, but provides an impetus for organizations to implement workplace literacy programs.

INTRODUCTION

Over the past two decades, the workplace has emerged as a context in which to improve the basic skills of millions of Americans with limited literacy skills. As a result, a new field of practice has emerged, which will be referred to herein as workplace literacy education. To date, however, existing attempts to unite theory and practice in workplace literacy education have been hampered by a number of problems traditionally associated with adult literacy in general, as well as difficulties attributable to the unique nature of the workplace. These difficulties have confounded workplace educators' efforts to share knowledge and insight regarding the necessary components of viable workplace literacy programs, and have precluded the subsequent development of uniform guidelines generalizable across settings.

One of the most salient of these issues regards the notion of contextual learning as it has been appropriated by scholars and practitioners in the field of workplace literacy education. This inquiry will identify and discuss three vastly different approaches to contextual learning which have served as the basis for the development of workplace literacy programs in the United States. In what follows, a model for the design and implementation of workplace literacy programs will be presented based on a contextual learning format which takes into account the potential benefits of collaborative learning and reciprocal interaction in the workplace. It is hoped that this approach will serve to illustrate the need to bridge the gap between research and practice in workplace literacy education as well as provide a means to operationalize this link.

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DESCRIPTION OF THE PROBLEM

Contextual learning is a theoretical concept that attempts to link the cognitive processes and skills being learned with the specific content of the material being used to teach these skills. Educational programs which employ contextual learning formats make use of materials and content that relate to the needs of the learners and connect in some meaningful way with their life experiences. In the workplace, contextual learning most often refers to the design and selection of materials and content in accordance with the demands of specific jobs or job categories. It implies, either implicitly or explicitly, the belief that these materials are not only relevant to the needs of the worker but consistent with his or her overarching life interests, goals, and objectives. Accordingly, many proponents of workplace literacy education programs argue that grounding these forms of practice in the theoretical notion of contextual learning promises to make remarkable inroads into the problem of workplace illiteracy. For the most part, however, these promises have not been realized, although one can point to a few outstanding exceptions. Despite the fanfare and the many publications that have drawn attention to workplace literacy education, a major gap remains between the potential benefits inherent in the theoretical notion of contextual learning and what workplace literacy education practice is actually achieving.

The gap between the theoretical potential of contextual learning and the performance of actual workplace literacy education practice is a serious challenge to researchers, practitioners, and the general public. It calls into question the validity of contextual learning as a theoretical base for these programs. The gap seriously jeopardizes an already anemic commitment to workplace education within business and industry. Finally, it threatens to undermine the efficacy of society's attempts to address the large number of adults in our society with limited literacy skills. Thus, attention to this gap between theory and practice in workplace literacy education should be a major concern among those interested in both contextual learning as an idea and workplace literacy education as a form of practice. To date, however, this problem has received the attention of only a few scholars in the field. Clearly, considerable more attention to this research-to-practice gap is needed on the part of both researchers and practitioners. This paper is directed toward this end.

THREE FORMS OF CONTEXTUAL LEARNING

The idea of learning in context has been manifest in at least three different forms within workplace literacy education. These will be referred to as worksite-centered, work-centered, and worker-centered. Worksite-centered practices can be considered analogous to the traditional school-based approach to learning which stresses that once a student has mastered a number of basic skills, he or she is prepared to apply these skills to a wide range of situations or contexts. Workplace literacy programs adopting these practices generally employ some form of "generic" prepackaged curriculum thereby ignoring individual differences in learning styles and context-specific variability across work settings (Fingeret 1990). Consequently, there is often little difference between the materials and methods utilized in these types of programs and those characteristic of literacy training offered at other non-worksite locations. In the strictest sense of the term, these programs are only "contextual" because they offer training in the context of the learner's work site, and therefore could easily be viewed apart from the domain of contextual learning practices. Regardless, most literacy researchers acknowledge that these programs are relatively ineffective in either improving the literacy skills of the participants or the performance of the company for which they work.

This realization has led to an emphasis on a second form of workplace literacy education, one that grounds the educational program within the specific context of the worker's job (Mikulecky and Ehringer 1986; Philippi 1988; Anorve 1989; Collins et al. 1989; Soifer et al. 1989; Dunn-Rankin and Beil 1990; Chisman

1989; 1990; Chisman and Campbell 1990; Fingeret 1990; Rothwell and Brandenburg 1990). This shift in orientation from worksite centered to work-centered practices, or from "worker literacy to workplace literacy" (Collins et al. 1989: 456), represents a significant point of departure from more traditional approaches in that the demands of the workers' jobs are used as the basis for identifying and selecting "contextually appropriate" materials and methods. With the growth of the workplace literacy education movement, this form of context-based practice has come to represent the dominant view in workplace programs. Although appearing to be more consistent with the theoretical view of contextual learning and backed with empirical data asserting its effectiveness in both military and civilian settings (Sticht 1975, 1981, 1989; Philippi 1988; Collins et al. 1989; Chisman and Campbell 1990), work-centered literacy education often gives the workers themselves little say in what these demands are, the specific skills to meet these demands, or methods and materials used. Thus, in this approach, the learner provides little input and acts as recipient of services designed and implemented by educational personnel based on their perceptions of context-specific demands of the work environment (Fingeret 1990).

A third worker-centered view of contextual learning is emerging. Also described as the participatory model (Fingeret and Jurmo 1989), or the learner-centered (Anorve 1989; Soifer et al. 1989) or student-centered approach (Collins et al. 1989), the worker-centered view is based on a theoretical framework and set of practices that take into account the learner's needs, perceptions, and interests as central to the educational process, and emphasizes a collaborative relationship between educators and participants in the design and implementation of workplace literacy programs. This approach allows for the selection of materials and methods which are contextually relevant and meaningful to the learner in consideration of the learner's unique experiential history and situation-specific needs and objectives within the framework of specific job tasks. This worker-centered view stresses active learner involvement in all phases of the educational process and is therefore more akin to the notion of contextual learning as it has been articulated both by cognitive psychologists and by scholars and practitioners of adult education. Unfortunately, only a few pioneering workplace literacy programs have experimented with this approach (see Anorve 1989, Collins et al. 1989, or Soifer et al. 1989, for examples).

THE RECIPROCAL MODEL OF WORKPLACE BASIC SKILLS EDUCATION

It has become quite clear from the preceding discussion that the form contextual learning takes varies greatly according to the relative degree of learner participation in all phases of the instructional process, ranging from strictly passive forms, where the learner is merely present in the program, to highly active forms, characterized by learner involvement in the design, implementation and evaluation of his or her own learning (see Jurmo 1989, who presents a hierarchy of learner participation in adult literacy programs). The latter viewpoint, characteristic of the worker-centered approach, is at the core of the Reciprocal Model of Basic Skills Education presented in this section. It is important to note, however, that this model not only draws heavily on the notion of highly active and collaborative contextual learning, but incorporates basic assumptions regarding the role of business and industry in workplace literacy programs. Furthermore, at the heart of the Reciprocal Model of Workplace Basic Skills Education are fundamental tenets of reciprocity as developed in the anthropological and biological sciences, which serve as a metaphor important in guiding its framework.

In anthropology, the concept of reciprocity was first introduced by Mauss (1924), as a principle used to explain forms of gift exchange practiced among cultures. For him, reciprocal exchange was the core of social solidarity among societies. Somewhat later, Levi-Strauss applied Mauss' notion of reciprocity to the study of spouse exchange among groups as a means of incest avoidance, in his now classic work, **The Elementary Structures of Kinship** (1949). More recent "mainstream" approaches, built upon these ideas,

outlined various forms of reciprocity among individuals and groups according to types of reward (direct or indirect) and exchange (the currencies involved), temporal factors (short-term or long-term), and in consideration of degree of relatedness among participants (Service 1966; Sahlins 1972; Alexander 1979). The basic principles of reciprocity, however, were perhaps most clearly articulated by the biologist Robert Trivers. In his landmark paper, **The Evolution of Reciprocal Altruism** (1971), Trivers outlined the theoretical foundation for subsequent reconceptualization and research in biology and the social sciences on the nature of reciprocity within species, by means of a simple economic cost/benefit model. Essentially, his argument is that apparently altruistic behavior, whether measured in terms of resources, time, energy, or the assumption of risk, is advantageous (i.e., adaptive) if such behavior leads to a payback over time from the recipient that is greater than the initial cost incurred by the altruist. In other words, by acting cooperatively, both parties benefit more than they would be acting alone.

Since Trivers' (1971) pioneering work, empirical support for his thesis has been provided across a wide range of species. Social scientists interested in human behavior have stressed that humans, given their universal tendency to live in groups and their capacity for the long-term recognition of behaviors, are particularly suited for the development of complex forms of reciprocal interaction of long duration and considerable intricacy (Essock-Vitale and McGuire 1980). This approach has been widely used by anthropologists to explain general principles of reciprocity as traditionally reported in the ethnographic record, and serves as a basis for ongoing research on social interaction employed by a number of ethnographers worldwide.

The importance of reciprocity in workplace literacy education has been alluded to by several researchers advocating worker-centered approaches to contextual learning. For example, Collins et al. (1989) report that reciprocity is considered by educational staff to be a core idea directing the student-teacher learning process in the Worker Education Program initiated by the Amalgamated Clothing and Textiles Workers' Union (ACTWU) in New York. In this program, learners are encouraged to provide time or services in exchange for free education, counseling, and other services provided by the Union. In the Academy, a learner-centered workplace literacy program directed by Eastern Michigan University (EMU), learning is viewed as a "reciprocal process" (Soifer et al. 1989: 67) between facilitators and participants. For the most part, however, reciprocity is rarely viewed as a central feature of workplace literacy programs, as it is in the Reciprocal Model of Workplace Basic Skills Education. Although this model incorporates the principles of other worker-centered contextual learning models, it deviates from previous approaches according to several fundamental assumptions.

The first of these assumptions concerns the nature of reciprocity which varies according to types of benefits incurred. Traditional forms of public education as well as many adult education programs are most likely to realize indirect, long-term benefits in society. Conversely, workplace literacy programs are likely to be organized according to more direct types of reciprocal interaction, which demand more immediate, short-term forms of payback on costs incurred. Although there are numerous examples in business and industry of educational programs based primarily on altruistic motives, it is more often the case that these long-term benefits are a fortuitous byproduct of more direct forms of reciprocity. Simply stated, if businesses are to employ workplace literacy programs on a large scale, these programs need to demonstrate their effectiveness to employers. In other words, workplace literacy programs must be able to either demonstrate sufficient increases in profits to justify their expense in cost/benefit terms, or be able to show significant gains by more proximate measures (e.g., increased job performance by participants, lower rates of absenteeism, etc.).

The second assumption of the Reciprocal Model of Workplace Basic Skills Education concerns the role of the employer in the educational process. Although this model incorporates basic principles of worker-centered contextual learning approaches discussed in the last section, it deviates from these approaches in that the needs, goals, and objectives of both the employer and worker are given equal priority in the design and implementation of workplace literacy programs. That is, other worker-centered approaches tend to place too much emphasis on the needs of the worker relative to those of the employer due to the fact that, in most cases, they were originally developed for adult literacy instruction (Fingeret and Jurmo 1989) and subsequently adapted for use in the workplace (for example, see Anorve 1989, or Soifer et al. 1989). Conversely, the Reciprocal Model of Workplace Basic Skills Education is specifically designed to accommodate the unique nature of workplace literacy education.

The third and final assumption of the Reciprocal Model of Workplace Basic Skills Education, closely related to the other two, specifies that workplace literacy programs must provide tangible benefits to both the employer and worker for them to be considered viable educational delivery systems targeted at adult workers. For workplace literacy programs to succeed on a large scale, the benefits must be greater than costs for both employers and employees.

CONCLUSIONS AND IMPLICATIONS

Workplace literacy programs that are based on the theoretical notion of contextual learning are seen by many as a viable interventionist strategy to help ameliorate the problem of workplace illiteracy. However, vastly different conceptions of contextual learning have been used as the basis for the design and implementation of workplace literacy programs. These have been classified into worksite-centered, work-centered, and worker-centered approaches according to the relative degree of learner involvement in all aspects of the instructional process. Of these, worker-centered approaches, which emphasize highly active and collaborative participatory learning techniques, are most consistent with the theoretical notion of contextual learning as espoused by both cognitive psychologists and by scholars and practitioners of adult education. For this reason, they appear to hold the most potential for the future of workplace literacy education.

The Reciprocal Model of Workplace Basic Skills Education advanced in this inquiry is an extension of previous approaches to workplace literacy education. It employs principles of worker-centered contextual learning formats as well as fundamental tenets of reciprocity as developed in the fields of anthropology and biology as a metaphor to guide its framework. In this model, reciprocity is viewed as a central feature of workplace literacy education, rather than as a subset of participatory learning, or as a synonym for collaborative learning techniques. It specifies that the benefits of reciprocal interaction in workplace literacy programs must be greater than the costs for both employers and workers, rather than primarily for the employer (as in worksite-centered and work-centered approaches) or the employee (as in other worker-centered approaches). The Reciprocal Model of Workplace Basic Skills Education is designed according to the unique nature of the workplace in that it provides an impetus for both employers and employees to implement and support workplace literacy programs. It also accords well with strategies of peer learning and teamwork as formulated by workplace educators and training and development specialists, and may complement the process by which individuals become involved in these programs. (See Babchuk and Courtney, these proceedings). Furthermore, this approach may serve to help bridge the gap between research and practice in one important category of adult learning.

LITERATURE CITED

Alexander, R.D. (1974). Darwinism and Human Affairs. Seattle: University of Washington Press.

Anorve, R.L. (1989). Community-Based Literacy Educators: Experts and Catalysts for Change. In A. Fingeret and P. Jurmo (Eds.), Participatory Literacy Education. New Directions in Continuing Education, No. 42. San Francisco: Jossey-Bass.

Chisman, F.P. (1989). Jump Start: The Federal Role in Adult Literacy. Final Report on the Project of Adult Literacy. Southport, CONN: Southport Institute for Policy Analysis.

Chisman, F.P. (1990). Toward a Literate America: The Leadership Challenge. In F.P. Chisman and Associates (Eds.), Leadership for Literacy: The Agenda for the 1990's. San Francisco: Jossey-Bass.

Chisman, F.P., and Campbell, W.L. (1990). Narrowing the Job-Skills Gap: A Focus on Workforce Literacy. In F.P. Chisman and Associates (Eds.), Leadership for Literacy: The Agenda for the 1990's. San Francisco: Jossey-Bass.

Collins, S.D., Balmuth, M., and Jean, P. (1989). So We Can Use Our Own Names, and Write the Laws by Which We Live. Educating the New U.S. Labor Force. Harvard Educational Review, 59, 4, 454-469.

Dunn-Rankin, P., and Beil, D. (1990). A Primer for Workplace Literacy Programs. Training and Development Journal, 44, 8, 45-47.

Essock-Vitale, S.M., and McGuire, M.T. (1980). Predictions Derived From Theories of Kin Selection and Reciprocation Assessed by Anthropogical Data. Ethology and Sociobiology, 1, 233-243.

Fingeret, A. (1983). Social Network: A New Perspective on Independence and Illiterate Adults. Adult Education Quarterly, 33, 133-146.

Fingeret, A. (1989). The Social and Historical Context of Participatory Literacy Education. In A. Fingeret and P. Jurmo (Eds.). Participatory Literacy Education. San Francisco: Jossey-Bass.

Fingeret, A. (1990). Changing Literacy Instruction: Moving Beyond the Status Quo. In F.P. Chisman and Associates (Eds.), Leadership for Literacy: The Agenda for the 1990's. San Francisco: Jossey-Bass.

Fingeret, A., and Jurmo, P. (1989). Participatory Literacy Education. New Directions in Continuing Education, No. 42. San Francisco: Jossey-Bass.

Jurmo, P. (1989). The Case for Participatory Literacy Education. In A. Fingeret and P. Jurmo (Eds.), Participatory Literacy Education. New Directions in Continuing Education, No. 42. San Francisco: Jossey-Bass.

Levi-Strauss, C. (1969). The Elementary Structures of Kinship. Boston: Beacon Press (originally published in French, 1949).

Mauss, M. (1954). The Gift. I. Cunnison, trans. New York: Free Press (originally published in French, 1924).

Mikulecky, L., and Ehlinger, J. (1986). The Influence of Metacognitive Aspects of Literacy on Job Performance of Electronic Technicians. Journal of Reading Behavior, 18, 1, 41-62.

Philippi, J.W. (1988). Matching Literacy to Job Training: Some Applications From Military Programs. Journal of Reading, 31, 658-666.

Rothwell, W.J., and Brandenburg, D.C. (1990). The Workplace Literacy Primer: An Action Manual for Training and Development Professionals. Amherst, MA: Human Resource Development Press.

Sahlins, M. (1972). Stone Age Economics. Chicago: Aldine.

Service, E.R. (1966). The Hunters. Englewood Cliffs, NJ: Prentice Hall.

Soifer, R., Young, D.L., and Irwin, M. (1989). The Academy: A Learner-Centered Workplace Literacy Program. In A. Fingeret and P. Jurmo (Eds.), Participatory Literacy Education. New Directions in Continuing Education, No. 42. San Francisco: Jossey-Bass.

Sticht, T.G. (1975). Reading for Working. Alexandria, VA: Human Resources Research Organization.

Sticht, T.G. (1981). Basic Skills in Defense. Alexandria, VA: Human Resources Research Organization.

Sticht, T.G. (1989). Adult Literacy Education. Review of Research in Education, 15, 59-96.

Trivers, R.L. (1971). The Evolution of Reciprocal Altruism. Quarterly Review of Biology, 46, 4, 35-37.

MODEL FOR FOCUSING RESEARCH IN ADULT AGRICULTURAL EDUCATION

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ABSTRACT. This paper describes a research model which was developed to illustrate the priority research areas for adult education in agriculture. Four functional areas in adult education were identified as: needs assessment and analysis, individual learning systems, delivery systems, and evaluation systems. Within the function-oriented framework seven priority research areas were identified as: cultural trends, delivery methods, evaluation of process and product, content and organization, policy and administration, preparation and continuing education of adult educators, and the essence of adult learning. Adult education researchers were encouraged to collaborate with others in addressing the research priorities identified in the model.

INTRODUCTION

Dynamic changes in agriculture have resulted in significant shifts in agricultural employment. At the turn of the century, over half of all persons employed in the U.S. were directly involved in the production of food and/or fiber products. Since that time, the percentage of persons employed in agriculture has declined dramatically. In 1986, there were 20 million workers (18.8%) employed in agriculture in the U.S. However, only 3.8 million (3.6%) were involved in agricultural production. The remaining 16.2 million persons (15.2%) were employed in occupations in the supplies, services, and marketing sectors (United States Department of Agriculture, 1990).

Coinciding with shifts in agricultural employment were corresponding changes in agricultural technology. Persons employed in the industry need to continually update their knowledge base to remain competitive. Coupled with the information explosion in agriculture and related fields, the demand for widespread dissemination of technical information has increased in a parallel fashion (United States Department of Agriculture, 1986).

Previous generations of persons employed in production agriculture were characterized by a limited amount of formal education. Many farm boys were encouraged to discontinue schooling after completing the eighth grade in order to begin work on the farm. For example, in 1950 only 20 percent of the adults on farms had graduated from high school, whereas 40 percent of their urban counterparts had completed high school at that time. By 1988, 81 percent of all adults in farm households had completed high school

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A more detailed account of the research model described in this paper is provided in "Empowering adults: A new Agenda for agriculture," by the NCR-158 Committee on Adult Education in Agriculture, North Central Region, Agricultural Experiment Station.

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compared to 76 percent of the adults in non-farm households (United States Department of Agriculture, 1990).

The importance and necessity of lifelong learning in agriculture cannot be denied. The information explosion in agriculture mandates that adults continue to learn and to put proven ideas into practice (Kahler, Morgan, Holmes, and Bundy, 1985). Programs to deliver new information are undergoing unprecedented change (Boone, 1985). Furthermore, there are more adults between the ages of 20 and 65 than ever before. The educational needs of adults in agriculture make it necessary for researchers to study appropriate delivery systems, trends, learning styles and policies.

Today the industry of agriculture differs significantly from that of earlier decades. There are more adults employed in agriculture than ever before when one considers the totality of the industry. Also, agricultural employees of today are more highly educated than those of previous decades. However, there is a growing need for continued education to help keep adults abreast of new skills, knowledge, and technology in agriculture (Harbstreit, 1987).

Technological advances in the agricultural industry (Lodwick and Morrison, 1982) combined with the overall information explosion in society has contributed to the need for effective and efficient adult education programs. Areas of biotechnology, marketing, processing, and distribution are dependent upon, and contribute to, the increased quantity and quality of information generated in agriculture. Farmers and persons employed in agribusiness need constant access to up-to-the-date information to operate their businesses profitably. Therefore, information has become a significant resource to be managed by those who are employed in agriculture.

Adult education in agriculture has historically been provided through public school agriculture programs and the Cooperative Extension Service (Harbstreit, 1987). Persons responsible for conducting adult agricultural education programs have traditionally been prepared with a strong background in production agriculture. Preparation in adult education has usually been secondary to the primary emphasis on technical agriculture (Knox, 1986; Martin and Omer, 1990).

Land grant colleges in the North Central Region of the United States have implemented an organizational structure to address problems and issues impacting adult education in agriculture. In 1988, a twelve-member committee representing each state of the North Central Region of Agricultural Experiment Stations, recommended the formation of a committee titled: NCR-158--Adult Education in Agriculture. The purposes of the committee were to:

1. Build on existing research in adult education in the region.
2. Develop an improved conceptual framework for future investigations.
3. Collaborate in design, methodologies, instrumentation, and analysis.
4. Integrate existing work.

During 1989-90, a subcommittee of the NCR-158 committee was charged with identifying priorities for research related to adult education in agriculture (Birkenholz, Harbstreit, and Law, 1990). Following the prioritization process, a theoretical model was developed to illustrate major research thrusts in adult agricultural education in the North Central Region (see Figure 1, Model for Focusing Research in Adult Agricultural Education). This model delineates the major functional components of adult agricultural education as: needs assessment and analysis, individual learning systems, delivery systems, and evaluation systems.

These components form the foundation of an adult agricultural education enterprise which is directed toward the empowerment of adults in the industry of agriculture. Empowerment in this context focuses on the development of decision-making, management, and human relations skills among adults employed in agriculture. Empowering individuals is an important prerequisite to enhancing the efficiency of the industry of agriculture.

The model presented in Figure 1 identifies specific priority research areas which demand attention to advance adult education in agriculture. Cultural, social, educational, and occupational trends should be examined as they impact the industry of agriculture. Specific attention should be directed towards the attitudes and perceptions of the consuming public with regard to agricultural issues. Research efforts should also encompass needs assessments for the various clientele groups which may benefit from adult education in agriculture. Expanded clientele groups for future adult education programs may include consumers, policy makers, and agribusiness employees in additional to agricultural producers.

The methods used to deliver information to target audiences should also be studied. Innovations in communication technologies provides additional avenues for information transfer. Microcomputers and associated telecommunication devices hold promise for adaptation to the information diffusion process for adults in agriculture. Research on instructional delivery methods should also focus on matching appropriate instructional strategies with desired learner outcomes.

Accountability has become an important issue in education. Adult education in agriculture is no exception. Research efforts should be directed toward evaluating the processes and products of adult agricultural education programs. Costs, benefits, and measures of effectiveness should be examined. Studies are needed to review the quality and usefulness of instructional materials which are used in adult programs. Also, the net impact of adult education in agriculture should be examined to determine the influence of such programs on the development of communities in both rural and urban areas.

The content and organization of adult education in agriculture is the fourth major priority area for research. An expanded labor force in agriculture will necessitate delivery of information from a variety of sources. Other target audiences for adult education in agriculture will include consumers, policy makers, and persons employed in businesses related to agriculture who need specialized information to address their unique concerns. In addition, production and agribusiness workers will benefit from the increased availability of information which can be used to make informed management decisions. Recognizing the diversity in agricultural production, researchers should identify content which is most appropriate for each producer group and investigate appropriate avenues for dissemination.

Research related to the policies and administration of adult education in agriculture should be conducted. Historically, agricultural education programs for adults have been provided through the Cooperative Extension Service or by agriculture teachers hired by local education agencies. Future support for adult programs will be enhanced through research which examines the philosophy and mission of the program. Additional information is needed to identify institutions which are responsible for planning, funding, delivering, administering, and evaluating adult education programs in agriculture.

The preparation of qualified adult educators is prerequisite to effective delivery of agricultural information to adult audiences. Efforts should be made to develop program models for the preparation of adult educators who plan to work with agricultural audiences. Specific competencies should be identified which are needed for adult educators in agriculture to function effectively. Additional emphasis should also be directed toward the continuing education needs of adult educators in agriculture. Specifically, studies

should be conducted on an on-going basis to assist adult educators in responding to expected changes in the content and target audiences.

The seventh major priority area for research concerns the nature of the adult learner. A variety of learning theories have been proposed in the past, however, they have traditionally focused on younger students in more structured educational environments. Information is needed to contribute to the body of knowledge related to adult learning, motivation, problem solving, and decision making. Further research is also needed regarding how and why adults learn. Such information would assist educators as they plan and deliver instructional programs for adults in agriculture.

The Model for Focusing Research in Adult Agricultural Education provides direction for future research. Adult agricultural education researchers in the North Central Region should examine the model to identify opportunities to contribute to the body of knowledge in the field. Collaborative efforts among educational researchers are encouraged to build upon the conceptual framework established from previous studies. Significant progress in adult agricultural education is expected from research efforts which focus on the issues outlined in the model.

LITERATURE CITED

Birkenholz, R. J., Harbstreit, S. R., and Law, D. A. (1989). Validation of research priorities for adult education in the north central region. In M. F. Burnett (Ed.), Proceedings of the Sixteenth Annual National Agricultural Research Meeting, (pp. 303-310). Orlando, FL.

Boone, E. J. (1985). Developing programs in adult education. Englewood Cliffs, NJ: Prentice-Hall.

Harbstreit, S. R. (1987). Educational needs of employees of urban agribusinesses, Unpublished doctoral dissertation, University of Missouri, Columbia.

Kahler, A. A., Morgan, B., Holmes, G. E., and Bundy, C. E. (1985). Methods in adult education (4th ed.). Danville, IL: Interstate Printers and Publishers.

Knox, A. B. (1986). Helping adults learn. San Francisco, CA: Jossey-Bass Publishers.

Lodwick, D. G. and Morrison, D. E. (1982). Appropriate technology. In D. A. Dillman and D. J. Hobbs (Eds.), Rural society in the U. S.: Issues for the 1980's (pp. 44-53). Boulder, CO: Westview Press.

Martin. R. A. and Omer, M. H. (1990). Perceptions regarding instructional methods used in adult agricultural education programs. Journal of Agricultural Education, 31,(2), 2-6.

United States Department of Agriculture. (1986). Research for tomorrow (1986 Yearbook of Agriculture). Washington, DC: author.

United States Department of Agriculture. (1990). Americans in agriculture: Portraits of diversity (1990 Yearbook of Agriculture). Washington, DC: author.

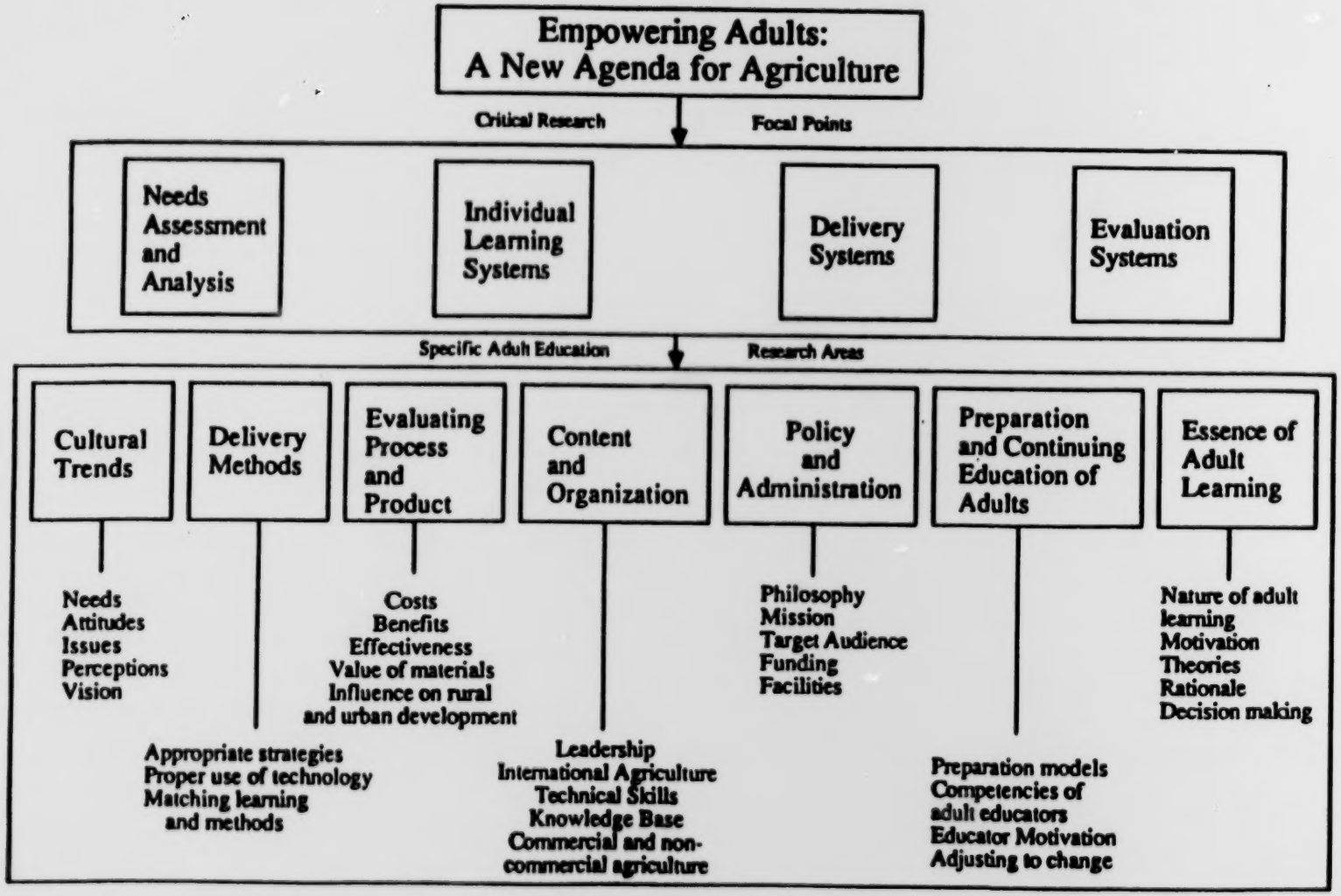

Figure 1. Model for Focusing Research in Adult Agricultural Education

A RESEARCH AGENDA FOR ADULT CIVIC EDUCATION

David L. Boggs and Harold W. Stubblefield[1]

ABSTRACT. The purpose of this paper is to propose a tentative research agenda that would contribute to a knowledge base for adult civic education comparable to what has been created for other facets of the adult education enterprise. Participation in the national conversation over what kind of country we wish to be requires some background, some knowledge of the situations and choices we face together. That knowledge is acquired through civic education. In fact, The quality of democracy seems to depend upon the degree to which civic education can assist citizens in finding meaningful bases for participation in public affairs. However, given the lack of attention in the professional literature to the specifics of adult civic education, the usual research questions concerning who participates and why, what forces shape curriculum, and what program planning models have been used are probably inappropriate. Rather, the approach taken is first, to identify clusters of questions that might be asked about the extent to which civic content is included within mainstream adult education programs, as well as the potential for doing so. And second, to consider the historical record of democratic social movements. These movements were and are schools of citizenship in which citizens learned skills of participation through study and action. In these voluntary associations participants found a "free space" in which they could challenge accepted social doctrine, particularly about gender, race, and class issues. Adult education became the vehicle for promoting the kind of society they characterized as ideal.

INTRODUCTION

The purpose of this paper is to propose a tentative research agenda that would contribute to a knowledge base for adult civic education comparable to what has been created for other facets of the adult education enterprise. It is our hope that participants in this session and in the wider community of adult education scholars will join in the discussion of this agenda, challenge its scope and substance, and suggest other approaches or themes. Adult civic education is, "The purposeful and systematic effort to develop in adults the skills and dispositions to function effectively as citizens in their communities as well as in the larger world. The purpose is to both develop understanding and judgment about public issues and to contribute to guided and informed decisions and actions through deliberation, public talk, and dialogue" (Boggs, 1991, p. 5). The agenda proposed here will be drawn from both contemporary and historical adult education practice. However, the study of deliberate attempts to equip persons to exercise their responsibilities as citizens or to secure those rights cannot be restricted to the institutional and programmatic efforts of professional adult educators. In particular, historical research about adult civic education extends into arenas of action about such contested issues as gender, race, class, and America's role in the world. This broader context suggests several areas within the history of adult civic education as a domain of inquiry for initiating new research efforts and for assessing previous research.

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THE RESEARCH PROBLEM

Democracy is both an ongoing conversation and an experiment whose meaning is still being defined and redefined through the process of education and dialogue in an open society. In Adult education and worldview construction (1991), McKenzie notes that when we are born we arrive, as it were, in the middle of a conversation to which we feel compelled to contribute. When that conversation is about the kind of country we wish to live in, and the rights and obligations we share as citizens, then participating in it requires some background, some knowledge of the situations and choices we face together. That knowledge is acquired through civic education. In fact, The quality of democracy seems to depend upon the degree to which civic education can assist citizens in finding meaningful bases for participation in public affairs. The relationship is reciprocal in that civic education fosters enlightened participation and participation is its own tutor. Through participation new areas in which learning through discussion, reflection, and further study is desirable are identified. At the same time, however, participation presumes some knowledge of the community, of government, and of the problems or issues at hand.

School-based civic education has been the primary vehicle for equipping Americans to understand the rights and fulfill the burdens of citizenship.

However, schooling can only provide basic introductory knowledge about something that is as fluid and dynamic as citizenship in the modern world. Also, it is adults and not children who bear the burdens of citizenship, who require information about complex local and national issues from solid waste disposal to catastrophic health insurance, and who require skills and wisdom to put information to effective use. The problem for democracy and for adult education appears to be the same: how to keep citizens and learners responsible for the whole community, while leaving them free to, and indeed assisting them in reaching personal objectives.

RESEARCH BASED ON CONTEMPORARY PRACTICE

The lack of attention in the professional literature to the specifics of adult civic education is probably indicative of a scarcity of distinct civic education initiatives on the part of adult education practitioners. The usual research questions concerning who participates and why, what forces shape curriculum, and what program planning models have been used are probably inappropriate because of a minimum investment in civic education. Given this situation, it seems useful to identify clusters of questions that might be asked about the potential for including civic content within extant adult education programs. The first cluster would appropriately address the issue of clarity, if not agreement, regarding fundamental concepts and terms: what are some reasonable learning outcomes to expect from civic education? how is it related to and a continuation of what was learned in school? how can civic education contribute to better understanding of citizenship? what is meant by civic virtue and how can it be fostered through programs of civic education?

A second set of questions might address to what extent civic knowledge, skills, and dispositions are already included within existing adult education programs: is there evidence of intent to include civic content in adult basic education? does continuing professional education concern itself with the civic responsibilities of participants? if so, how is civic content expressed? what learning outcomes are expected? does the emphasis vary for different categories of learners: prisoners, dentists, welfare mothers, public officials? what is the relative emphasis on rights versus responsibilities? what is learned and what was intended?

A third cluster of questions could examine the politics of civic education: how can adult education practitioners both remain neutral regarding controversial public issues and policy questions and still facilitate more thorough understanding of them? is neutrality desirable? what risks do adult education agencies run in collaborating with other agencies to provide civic education? what is the role of public policymakers in civic education programs? how is controversy managed? how does the experience vary for private versus public adult education agencies?

Finally, and perhaps most importantly, since concern for civic affairs has diminished in contemporary adult education practice, what can be done to restore it to our agenda. To this end a comparison of American society with other countries and cultures may be instructive: how have citizens of formerly totalitarian regimes been able to develop a civil society? how have they learned not to entrust government with sole responsibility for determining what is good, not to fear participation in dialogue over issues of public importance, and not to fear criticism and the risks of divisiveness?

HISTORICAL RESEARCH IN ADULT CIVIC EDUCATION

The history of adult civic education as a domain of inquiry belongs not only to professional adult education but also to the humanities and social sciences, for the study of men and women as citizens cannot be narrowly restricted. Research into the history of adult civic education should properly begin with the development of adult education as a body of educational and social thought and with its relationship with more comprehensive bodies of social thought. Adult civic education theories--as is true of general adult education theories--are derivative from social theories and are not original to adult education. A historical analysis of adult civic education cannot be conducted in isolation from social thought. Christopher Lasch's (1990) The true and only heaven: Progress and its critics provides this connection with the intellectual traditions from which adult education theory in general and adult civic education theory in particular are derived.

The forms that adult civic education has taken and its changing conceptions, methods, and purposes are rooted in this broader body of thought about the nature of adult education and its relation to the larger society. Stubblefield's (1988) Toward a history of adult education in America is a recent attempt to analyze the development of adult education thought as it emerged in the modern adult education movement. This study sheds light on the myth that now abounds in contemporary adult education literature and in conversations with adult educators at conferences: the interwar period (1920-1940) constituted a "Golden Age" of adult education. In this period adult educators--that is, those who gathered under the auspices of the American Association for Adult Education--used adult education as an instrument of social reform. In reality, opinions about the role of adult education in society diverged widely, and with few exceptions conservative opinion prevailed. There is little evidence in the literature to suggest social change as it pertained to the segregation of races, the separate sphere for women, or the capitalist for the production and distribution of goods and services. Nor was the issue of how the transition from education to action occurred resolved. One can only ask: What social change? By what means?

Democratic social movements. A new educational and social historiography that began to emerge twenty-five years ago has highlighted how an educational process lies at the heart of democratic social movements. These movements were and are schools of citizenship in which citizens learn skills of participation through study and action. In these voluntary associations participants found a "free space" in which they could challenge accepted social doctrine, particularly about gender, race, and class issues, but the issues are not limited to those. Sara Evans and Harry Boyte's (1986) Free spaces: The sources

of democratic change in America provides a popularly written but conceptually and descriptively rich history.

The riches of this history for a study of adult civic education can only be suggested here by selected examples. From after the end of the Civil War to the beginning of World War I was a period of social and economic transformation in American society to which many Americans organized responses that combined education and action in opposition to accepted economic and social doctrines. These organizations are familiar to most Americans but not as schools of citizenship: the Grange, the Farmer's Alliance, the Knights of Labor, the National American Woman Suffrage Association, and the Women's Christian Temperance League. More recent examples are the civil rights movement, the women's liberation movement, and the protest against the war in Vietnam in the 1960s. Persons who want to see how this kind of historical research is conducted should begin by studying Theodore Mitchell's (1987) Political education in the Southern Farmers' Alliance. The several books on the Highlander Folk School are also instructive.

"Mainstream" adult civic education. What is characterized here as "mainstream" adult civic education encompasses a wide range of approaches, including the study of the positions of candidates for office, forms of liberal education to develop informed and rational citizens, and engaging citizens in study and action about community problems. "Mainstream" adult civic education, unlike democratic social movements, normally operates within the boundaries of socially accepted beliefs and established structure. For a study of institutional and programmatic initiatives, Stubblefield (1974; 1976) is helpful, but there is as yet no satisfactory history of "mainstream" adult civic education.

In adult civic education the line between education for citizenship and indoctrination in American values and patriotism has sometimes been crossed. As a cautionary tale, students of mainstream adult civic education should begin in the early twentieth century with the Americanization movement and one agency of that movement, the community social center. In these instances adult civic education was not always benign nor did it promote open and free discussion of conflicting ideas.

Programs that used lectures and/or discussion to disseminate ideas and issues were the Chautauqua Institution and the tent chautauquas in the progressive period, the forum movement in the first four decades of the twentieth century, and the San Francisco School for Social Studies in the 1930s. Various initiatives after World War II in the 1950s-1980s included the Fund for Adult Education's Test Cities Projects and library discussions, the Foreign Policy Association's Great Decisions program, the Domestic Policy Association's (Kettering Foundation sponsored) National Issues Forum.

Women's initiatives in adult civic education have encompassed a wide range of approaches. The General Federation of Women's Clubs founded in 1890 conducted research on social conditions and became an advocate for legislative and programmatic responses. The League of Women Voters, the successor to the woman's suffrage organization, confined its work to the study of issues, but in the early years it focused on ways to get women motivated to study political issues.

These "mainstream" initiatives and others not cited suggest several questions for research: Upon what theory of citizenship and beliefs about the ranges of appropriate citizen action were these initiatives based? What motivational strategies were used to engage citizens in adult civic education? What are the oppositions to adult civic education when education becomes social criticism? What are the gender, race, and class elements in adult civic education?

LITERATURE CITED

Boggs, D. L. (1991). Adult civic education. Springfield, IL: Charles C Thomas, Publisher.

Evans, S. M., & Boyte, H. C. (1986). Free spaces: The sources of democratic change in America. New York: Harper & Row.

Lasch, C. (1991). The true and only heaven: Progress and its critics. New York: W. W. Norton.

McKenzie, L. (1991). Adult education and worldview construction. Malabar, FL: Krieger Publishing Co.

Mitchell, T. R. (1987). Political education in the Southern Farmers' Alliance: 1887-1900. Madison: The University of Wisconsin Press.

Stubblefield, H. W. (1974). Adult civic education in the post World War II period. Adult Education 24, 227-37.

Stubblefield, H. W. (1976). Adult education for civic intelligence in the post World War I period. Adult Education 26, 253-69.

Stubblefield, H. W. (1988). Towards a history of adult education in America. London: Croom Helm.

A COMPARISON OF ADULT BACCALAUREATE GRADUATES AND NONPERSISTERS

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ABSTRACT: The objective of this study was to discover the relationships between adult student persisters (college graduates) and nonpersisters (those who withdrew) and selected individual, situational, institutional, and psychological type variables. A "Former Student Survey" and Form G of the Myers-Briggs Type Indicator were used to obtain the data.

For individual characteristics persisters were more likely to be female, have more prior credits, have a planned major, take more credits per term, and use more strategies to obtain credit once enrolled. For situational variables, persisters were more likely than nonpersisters to have received financial aid, work fewer hours per week, used friends for personal support, and perceived a higher level of helpfulness for nonuniversity sources of support. The institutional factors that supported persistence were availability of courses, institutional procedures ranked more favorably, use of departmental advisors for information, advising and personal support, use of more university resources for general assistance and ranking university resources more helpful.

A checklist of barriers to educational progress showed that persisters considered the following barriers of significantly less importance than nonpersisters: low motivation, unclear goals, limited energy, lack of confidence and finances. There were no significant differences between persisters and nonpersisters on the dimensions of psychological type as measured by the Myers-Briggs.

INTRODUCTION

By 1993, adults aged twenty-five and over will account for 49 percent of all college students. By the year 2000, the Carnegie Commission predicts that 60 percent of all students in higher education will be nontraditional (i.e., over twenty-five, less than full time, and fulfilling several adult roles) (Lace, 1986). Current research indicates that over 35 percent of the students in higher education in Minnesota at this time are over twenty-five (Williams, 1989).

As colleges and universities seek ways to effectively serve these students, it is important to develop a body of knowledge enabling the institution to understand the factors contributing toward persistence of adult learners. These students are valuable members of the university community and it is important to recognize their needs and provide the necessary resources to aid in their retention and to facilitate their graduating from the institution. Knowledge of the circumstances and problems encountered by adult students can lead to meaningful interventions that might make a difference between a student graduating or withdrawing. An institution cannot control or influence all variables, but appropriate policies, scheduling, and support services can be provided to enhance the educational experience of these students.

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PURPOSE OF THE RESEARCH

Higher education is based on the premise that individuals with different motivations and personalities can be served by colleges and universities; however, not every student remains through degree completion. This study was conducted in order to compare adult student persisters and nonpersisters in an undergraduate baccalaureate degree program. It was the objective of the research to determine which characteristics discriminate between those who complete their undergraduate degrees and those who do not.

The personal and situational aspects of the student's environment and institutional factors all were hypothesized to contribute to the likelihood of undergraduate degree completion. The inclusion and hypothesized direction of the independent predictor variables was based on theories and research findings related to participation and nonpersistence of adult learners. They reflect those characteristics of the individual and the environment deemed most likely to be related to persistence and nonpersistence of adult students.

RESEARCH METHODOLOGY

For the purposes of the study, a persister was defined as an adult student who had graduated from college with a bachelor's degree. A nonpersister was an adult student who had enrolled in a degree program, and made no progress toward the degree for one or more academic years. An adult students is generally one who is (a) responsible for him or herself and frequently directly responsible for the well-being of others; (b) perceived by others as generally fulfilling several roles typical of mature adults in our society; and (c) one who perceives formal education activity as only one of several competing or conflicting priorities (Hughes, 1983). In addition, for this research, the adult student was 25 years of age or older.

A random sample of 150 adult student persisters and 150 nonpersisters was selected from populations entering Winona State University through the Adult Entry Program between 1983 and 1988. They were asked to complete a "Former Student Survey" and Form G of the Myers-Briggs Type Indicator (MBTI). Inferential and descriptive statistical techniques were used to analyze the data. Frequencies and percentages were computed for persisters, nonpersisters and the total group where appropriate. Hypotheses were tested utilizing a Student's t. The difference between means was considered significant at the .05 level.

A stepwise discriminant analysis was used to determine the variables which best discriminated between persisters and nonpersisters. It also indicated the percent of variance accounted for by each predictor. A linear regression equation was then developed for classifying cases into persister and nonpersister categories. Discriminant analysis served both a forecasting function to predict group membership and an evaluative function which addressed the question of how well the equation fit the data from which it was derived (Marascuilo and Levin, 1983).

FINDINGS

In terms of individual variables, the research found that persisters had more prior credits, had a planned major, took more credits per term and used more strategies for earning credit. There were no significant differences between persisters and nonpersisters on the four dimensions of psychological type as measured by the MBTI: Extraversion or Introversion, Intuition or Sensing, Judgment or Perception, and Thinking or Feeling.

The research regarding situational circumstances found that persisters were more likely than nonpersisters to have received financial aid, to work fewer hours per week, to have used friends for personal support and to perceive a higher level of helpfulness for nonuniversity sources of support, particularly from friends.

On the institutional level, persisters, significantly more than nonpersisters, reported more availability of courses, ranked institutional procedures better, used departmental advisors for information, advising and personal support, used more university resources for general assistance and ranked university resources as more helpful.

Analysis of a checklist of barriers to educational progress showed that persisters considered the following barriers to be of medium or high importance significantly less than nonpersisters: low motivation, unclear goals, limited energy, lack of confidence, and finances. Additional analysis showed that persisters ranked the following barriers of no or low importance significantly more often than nonpersisters: transportation, place to study, friends/family opposed, unclear goals, low motivation.

These responses were very similar to the responses to an open-ended question for nonpersisters which asked their reasons for not graduating. Most of these were individual or situational and included many of the previously mentioned reasons. Responses to an open-ended question for persisters to indicate the factors which facilitated their graduation included such reasons as personal motivation, very supportive friends, reasonable cost and convenient location.

The discriminant analysis found the following variables significant and accounting for 35.36 percent of the variance between persisters and nonpersisters: number of credits taken per term, number of strategies used to obtain credit, number of barriers ranked high, gender, number of university resources used for assistance, and ranking of university procedures. Using those variables in an equation to discriminate between persisters and nonpersisters resulted in correct classifications for 73 percent of the persisters and 80 percent of the nonpersisters.

IMPLICATIONS FOR PRACTICE

One of the primary objectives of performing research is to improve practice. Findings from this study can be considered by colleges and universities throughout the adult student's experience from entry to degree completion. From the findings of this study, policies and procedures can be suggested to enhance the educational experience of adult students and increase the likelihood that they will remain at the institution and complete their degree programs. This will require the attention and cooperation of many university resources.

ENTERING THE UNIVERSITY

This research demonstrated the importance of recognizing the adult student's prior educational attainment and applying it toward his or her degree program. Institutions need to accept as much transfer credit as possible and apply it in meaningful ways. The more credit a student has to begin with, the more likely he or she will persist to degree completion.

It is also important, as part of the admission process, to provide information and referrals regarding various strategies available to obtain additional credits. Use of as many strategies as possible enhances the possibility of degree completion. Institutions should consider implementing policies that will allow

for credit by examination, independent study options and credit for prior learning through life and work experience.

FINANCING EDUCATION

Those students receiving financial aid were more likely to persist to degree completion. However, adult students are over overlooked when criteria for aid are established. Policies that are especially necessary and which should be implemented are aid for part-time study, aid extending for more sessions, and aid that recognizes the financial implications of adult roles.

PERSONAL SUPPORT SERVICES

Research findings suggest that it would be worthwhile for counselors and advisors to encourage students to seek out friends that could provide personal support. The institution could help by providing opportunities that would facilitate the development of such friendships. For instance, a nontraditional student's organization could be established to discuss issues relevant to adult students and to be a place for meeting and acquiring new friends. Academic departments could sponsor student branches of professional organizations that would provide a potential source of support. A resource room could be established for adult students where they could study, relax, socialize, and find reading material relevant to their developmental stages and life goals.

ACADEMIC FACTORS

In order to persist to degree completion it is essential that adult students obtain classes at times and in locations that are convenient for them. Courses need to be available evenings and weekends and in population centers within the institution's service area to make the courses geographically accessible. Video, correspondence and other nontraditional delivery systems should be provided.

Other significant findings related to academic factors include encouraging students to take as many credits as possible, decide and declare their major, and then utilize the department for advising and information. Special efforts will need to be made by departments to be accessible for extended hours and at off-campus sites. Workshops should be provided to train advisors to work with adult students, to assess academic needs and plan programs in light of adult experience and situations, and to help the faculty understand the total degree program structure.

CONCLUSION

This research can aid in the development of a typology of factors associated with adult student persistence and nonpersistence and can be a major step in predicting withdrawal behavior and in construction of a prediction model. Such a model could assist efforts to identify potential dropouts, counsel these students, and thereby reduce the human and social costs of attrition (Garrison, 1988).

When the adult student achieves degree completion, the positive benefits to the school, community, employer, family, and society in general are important. But most important of all, the individual adult student gains a tremendous sense of pride, job and accomplishment. This research was designed to contribute to the body of knowledge which can be used to support adult student persistence and lead to those mutual benefits.

LITERATURE CITED

Garrison, D. R. (1988) A Deductively Derived and Empirically Confirmed Structure of Factors Associated with Dropout in Adult Education. Adult Education Quarterly, 38(4), 199-210.

Hughes, R. (1983) The Non-Traditional Student in Higher Education: A Synthesis of the Literature. National Association of Student Personnel Administrators Journal, 3(20), 51-64

Lace, W. W. (1986) A Nontraditional Approach. Currents, May, 8-12.

Marascuilo, L. A. and Levin, J. R. (1983) Multivariate Statistics in the Social Sciences: A Researchers Guide. Monterey, CA: Brooks/Cole Pub. Co.

Williams, H. Y. (1989) Minnesota's Adult Learners. Minneapolis: Minnesota Association for Continuing Adult Education.

WAYS OF DOING: MOTIVATION, PERSONAL CHANGE AND THE DIFFUSION OF KNOWLEDGE

Sean Courtney[1]

ABSTRACT. This paper reports on a qualitative study designed to investigate the significance of motivation, learning and personal change in people's everyday lives. Our purpose was to throw light on the adult's motivation to participate in more formal learning environments by studying less familiar, less formal contexts. The context, in this case, was weight loss and weight loss programs. A total of sixteen (16) women and men have been interviewed to date. Early conclusions from the study are reported here.

CONTEXT OF PROBLEM

This study attempts to expand our understanding of Adult Motivation to Learn (AML) by responding to hypothesized connections between motivation, learning, action and personal change. It does so by approaching the subject of Adult Learning somewhat unorthodoxly which it will be the purpose of this paper to clarify. The empirical work being reported here is ongoing and part of a larger project on practical knowledge.

Current approaches to AML basically leave the concept of motivation and its interconnections unclarified. At the same time, despite years of research, there have been few investigations which try to get at people's understanding--in their own words--of what motivates them to learn and how they are able to accomplish their learning goals. Finally, participation research rarely takes seriously the link between the desire to acquire knowledge and how this knowledge is put to use. Thus this study is in part inspired by Rogers' work on the "diffusion of innovation" and Grattan's depiction of adult education as the "diffusion of useful knowledge".

Questions guiding the study include the following: How do adults react to the need for personal change and what accounts do they provide of their motivation to learn? How do they use the knowledge (learning) they acquire along the way. In other words, how is knowledge diffused at the 'micro' or individual rather than 'macro' or community level? When adults attempt to accomplish significant changes in their lives, how do they go about the learning 'work' involved?

RECONCEPTUALIZING MOTIVATION TO LEARN

The concept of motivation is central to the current study. Despite its importance to the study of Adult Learning (AL), the analysis of motivation has tended to stay within a fairly circumscribed discourse, e.g. the distinction between "intrinsic" and "extrinsic" to cite a case in point. We persist in seeing motivation as a reflection of a changing orchestration of needs, the legacy of Maslow's hierarchy, rather than, the position adopted here, as a negotiation between self and the environment in the pursuit of a more satisfactory lifestyle. Defined in Maslovian terms or as a reflection of underlying personality

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characteristics, as in the work of Boshier, motivation remains an unexplicated, even inexplicable reality, bluntly and solidly before our gaze. I would prefer to think of it as a permeable if dense and elastic entanglement constantly elongating according to how it is pushed and pulled.

Second, it has long appeared to me that it is important to take seriously the connection that learners are themselves trying to make between their current learning activity and its application. Men and women say that they have goals they wish to accomplish through their learning, skills they want to develop to help them in various facets of their lives. Instead of spending inordinate amounts of time and resources trying to ignore this universal fact, why not accept the fact that many adults have some kind of application in mind when they undertake learning and begin to explore the ramifications of this diffusion of practical knowledge. To quote one prominent researcher:

> Application is a much more basic process. It is largely the name of the game in real life. Hence, basic research about human beings requires a focus on how they go about acting in order to get things done. Basic research about human beings and organizations is research that focuses, at the outset, on how human beings and organizations use knowledge in order to act. (Argyris, 1982, p.xv.)

Our basic position is that to understand why adults learn or become involved in learning activities it is necessary to understand how individuals come to grips with their being in the world, their understanding of their own actions and what they believe about the causes of those actions. In other words, people can be found articulating a connection between where they are in life, what they are thinking and feeling about, and what they are currently doing and want to do. Just are there are "ways of knowing" which differ significantly from each other (see the eloquent text by Belenky and Associates) so too there are different "ways of doing".

In order to focus on "ways of doing" it is necessary to see that motivation as a concept is inevitably bound up with the concept of action (Parsons and Shiles, 1951). This we take to mean that when the person experiences and reflects on her needs, e.g. the need to enter a learning program, she does so within a context of daily actions which may be depicted as a steady flow or current in a given direction. The individual's personal history marches on and actions such as learning are often attempts to change the flow or are part of larger projects directed to that end. Thus, learning, often defined in terms of change, becomes itself part of the larger change process, a process which is inevitably beset with conflict.

PROJECT DESIGN AND PROGRESS

To conduct a study of this kind my colleague, Sandra Rahe, a doctoral student at the same university, and I chose to focus on the area of personal health. We know from recent studies, e.g. Aslanian and Brickell (1980), that many learning episodes are occasioned by the need to make fundamental changes or adaptations to changes. We were interested in the area of addictive or appetitive behaviors because they represent fundamental forms of action, and involve concepts of significance to the major project: habituated behavior or conduct, motivation and the desire for change, learning, personal self-concept, confidence, activity vs. passivity, and so forth.

Two basic questions guided our inquiry:

1. What accounts do people give of the factors or motivation behind significant episodes of personal change?
2. What role does learning or knowledge play in the accomplishment of personal change?[2]

Though the project is qualitative in nature a conceptual framework has been constructed along the lines suggested by Miles and Huberman (1983) who argue that qualitative inquiry is strengthened by the prior elaboration of frameworks and accompanying variables. In our case, there are three variable 'systems': Motivation/Action, Learning and Change.

To produce the Protocol upon which to organize a "conversation" (Spradley, 1979) with participants, we grouped a series of questions or inquiries around each of the three variable systems, questions aimed at probing orientations and understandings. An excerpt from the final Interview Protocol is reproduced below. Readers familiar with Tough's work will recognize similarity between our first question and his (Tough, 1982). Finally, we were encouraged to pursue a qualitative approach to this problem by Ross (1985).

To date fourteen women and two men, almost all involved in weight loss programs within the last five years, have been interviewed. The study has been conducted in three phases. Initially, three women were interviewed and a review of their responses became the basis for a revised form of the protocol. Subsequently, ten more women were interviewed with the protocol, by Rahe. At that point, analysis of the responses of these women became the basis of Courtney and Rahe (forthcoming). To date, the third and current phase, one more woman and two men have been interviewed by the present author with an enlarged version of the protocol.

SUMMARY OF FINDINGS

What accounts do our respondents provide of their motivation to learn and participate in weight loss programs? How do people account for their actions and the reasons for them? Our findings are briefly summarized here and will be expanded upon later.

A. MOTIVATIONAL 'WORK'

First, it is important to note that almost all of the subjects have or feel they have a history of the problem, some going back to childhood, youth, college.(Woman: "basically, I've always felt that I've been 10 lbs. over weight since probably high school"; Man: "weight has been a problem for me since I was, I think, five years old."). But the fact of that history does not account for present actions (in line with Rubenson, 1978, and London, Wenkert and Hagstrom, 1963). In order for a new set of actions to 'appear' i.e. join a weight loss program or go on a diet, the person has to be within a context which I can only describe as "living with the need for change", and within which she has become strongly predisposed to action. We might even say that she is surrounded by the need to make a change. The **motivation to act** with respect to losing weight amounts to a creation or articulation of a framework within which action becomes more likely, if not certain ("I think it was kind of a building thing"; a number of women spoke about weight which they couldn't lose after the birth of a child).

[2]Answers to this question are reported in Courtney and Rahe (forthcoming).

Second, particular events become triggers to action.("I had to buy fat clothes and then I decided I was going to lose wt. and keep it off".) Our hunch is that triggers derive their salience by becoming imbued with a 'symbolic' value. Events such as how one looks in a mirror in a department store occur all the time. But it is only during the 'context of motivation' that they are 'given' the value as a trigger. As a trigger they become the permission to act, what the person 'needed to know or see', in order to act. (This interpretation of the role of triggers in action expands upon that provided by Aslanian and Brickell.)

The idea of motivation as involving a dialogue or negotiation with the self emerge in the following instances:

> - Motivation as a state of mind: "I was determined I was going to lose wt. and I had my mind made up. I did not care if it was a lb. a week. I was going to lose it" or "Once I set it up I will go but it is just getting my mind into that. Once my mind is made up I am fine" or "Because just knowing myself I knew I could do it. I mean you make up your mind that you are going to do something and you're going to do it".
> - motivation as a feeling: "I was doing really well until I got pregnant. And then I just have not been able to get motivated again since."
> - motivation as having a goal: "The real reason (she said why she undertook to lose wt. during the present period) was for my brother's upcoming wedding. I wanted to lose 50 lbs. by then".

B. MOTIVATIONAL SUPPORT

Motivation, the orientation to act or persist in certain goal-specific actions, must also be supported in some way. In this context, it is useful to see it as a function of a 'force-field' as in Lewin's work. On the one side are those 'driving' factors which support action or continued effort. On the other are the 'restraining' factors which may suppress or dissipate activity. For example, on the positive driving side participants mentioned such factors as exercise ("I tell you the biggest thing is that I started exercising on a regular basis and I do it everyday now") and program structure ("and somehow having the weekly meeting... So at least you get to eat").

Perhaps the biggest driving factor and one worth elaborating separately is the intercession of significant others both outside of the program structure ("Like if I had not seen somebody in a few months and they saw me, they were like, "Wow you look great" or "When I was doing it my mother-in-law said nice things to me, gave me lots of compliments. People were going "We didn't know that body was in there") and within it ("You always get applauded for your wt loss. The whole group applauds...I would say that encouragement from about the other 40 people in the room was the biggest thing that I wasn't getting from before").

On the negative, restraining side are what are perceived as bad eating habits, an obvious category perhaps, lack of solidarity ("I was feeling all alone..I didn't have anybody to ask questions"), a history of past actions ("I knew that my attempts to lose wt. had not been successful"), and incomplete or unsuccessful actions (one woman used the "books" of another who was in a formal program: "I just used her books to lose the wt. And I lost (some wt, not specified). And then I got stuck").

One of the most personally significant findings to date has to do with what I will call the reconstruction of motivation. Typically, most participation studies treat motivation as a 'front-end' or independent variable, with learning/participation as the end product or dependent variable. In this study, the situation is reversed with women and men learning to become motivated, rather than the other way around. In

particular, the idea that losing weight is a long-term project (one of the men decided it was going to take him ten years to do it right; he is currently in his early 40s) seems to require that participants hit on the right combination of ideas and efforts that will sustain them over the long haul. They must, in essence, learn to become motivated in order to be successful in the long run.

CONCLUSIONS AND IMPLICATIONS

The findings reported here are but a small fraction of what is possible using the qualitative mode. Our ability to get at the precise nature of trigger events, for example, particularly their symbolic role as 'movers', would have been most difficult without the 'permission' to perform indepth linguistic analysis which the qualitative mode grants. The decision to use qualitative methods does not have to mean, however, giving up an interest in advancing hypotheses and theoretical arguments in anticipation of the findings. Indeed, the motivation to undertake this study was based on implications of arguments detailed in Courtney (1992). As a result, we pre-determined a conceptual framework (in terms of the three variable systems discussed above) along lines suggested by Miles and Huberman. Given the burgeoning interest in the more fluid, less boundary-specific forms of learning that we are seeing in the work of Marsick, the interest in 'social context' that we find in Jarvis and psychology's increasing interest in "practical knowledge", interest in using qualitative forms is likely to increase in the next few years and promises exciting dividends.

Fragment of Interview Protocol

I. (Motivation) Throughout your life time you have probably experienced various changes in yourself and your activities. Some of these changes probably happened accidentally, but today we'll focus on the intentional changes, the changes you have decided to achieve. I know that in the past you have been involved in a weight loss program. Tell me the story of your decision to lose weight.

II. (Learning) People learn or undertake learning projects throughout adulthood for a variety of reasons. Learning and change sometimes overlap in a person's life. What comes to mind when you think about learning something or a learning experience?

III. (Change) Losing weight sometimes involves changes in lifestyle, etc. Please tell me about another major change in your life.

References available upon request

HOMELESSNESS AND WORK EXPERIENCE: THE RESULTS FROM SAINT PAUL

Dennis R. Davis, Ph.D.[1]

ABSTRACT. I began working with the homeless population in Saint Paul only two years ago. With some eight years of youth work experience in jobs and training programs and six years of teaching experience in basic education behind me, I was prepared for yet another "at-risk" population to serve. I had seen, heard, if not done, it all. Wrong again.

Immediately I was confronted by both the individuality of the life stories and the commonality of the excuses--the newness of enthusiasm over actually working forty hours per week and the oldness of playing cards at the Mission on a sunny Friday morning. Housing! I heard from homeless advocates on one side. CD! I heard from another. MI! From yet another. These were exhortations and acronyms that cohered with my experience, but not totally--not completely. Again, the life stories returned.

Certainly "Propeller Man" continued his parade on Lake Street by flaying his arms at passers-by and certainly "Program Man" continued his charade by signing-up for every free service available, but the people who I worked with day-to-day, week-by-week, sincerely desired to create new life stories above and beyond their own autobiographies. Some did. Some did not. But given the choice and the opportunity, all tried.

The second year of the McKinney Grant extended from October 1, 1989 to September 30, 1990. During that period 158 clients from the program were enrolled in work experience. Fourteen of those participants are defined as "youth" and are excluded from this analysis. Therefore, the focus is upon the demographics, experiences, and outcomes of 144 adults.

This study addresses the following three fundamental questions in an attempt to better understand the population served and subsequently improve the quality of those services:

WHO	Who was served? That is, what were the characteristics of the population being served?
HOW	How were they served? That is, what elements were the most and the least effective in serving the population and what improvements can be implemented?
HOW WELL	How well were they served? That is, what was the outcome of the program in terms of positive and negative terminations?

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INTRODUCTION

Saint Paul was an initial recipient of a grant from the United States Department of Labor under the Job Training for the Homeless Demonstration Program (JTHDP). Commonly known as a McKinney Grant, this program has been administered by the Department of Planning and Economic Development and has involved the cooperation of several agencies--among them, Catholic Charities, St. Paul Public Schools, St. Paul Rehabilitation Center, St. Paul Housing Information Office, Minnesota Department of Jobs and Training, YWCA, Lutheran Social Service, and Job Corps. Different agencies have contributed their services at various stages in the program, but Catholic Charities has been the primary case management agency, SPRC the primary assessment agency, and the Saint Paul Public Schools the work experience agency. In addition, a special grant from the McKnight Foundation generously contributed to the needed monies for the work experience payroll.

This study was conducted in order to explore the efficacy of work experience in addressing the problems of the homeless during the 1989-90 grant cycle. For the last 20 years work experience has been a primary vehicle for the delivery of employment and training services to "disadvantaged" and "at-risk" populations. Such an all-inclusive and encompassing concept, implemented to increase employability by instilling good work habits and work skills in participants, had been set-up for mixed reviews. And work experience did not disappoint the detractors. Programs ranged from part-time to full-time, short-term to long-term, make work to skills training, summer youth to transitional adult, out-of-school to in-school, unsupervised to well-supervised, poorly-funded to well-funded, and specific client-based to open enrollment. In short, the gambit of human services delivered since the 1960's and the scope of their successes and failures.

Partially as a consequence of these difficulties and partially as a result of a more thorough understanding of the needs of "at-risk" populations, the following assumption is posited: work experience, standing alone, is not an effective instrument for providing an avenue toward self-sufficiency. Rather, it must be a component of a larger, more holistic, approach to human services in tandem with a complete case managed system.

Since this study is, in effect, an evaluation of work experience as it relates to homelessness, the following methodological assumptions should be clarified. The purpose of evaluations generally vacillates between "formative," tending toward action, and "summative," tending toward judgments. And the approaches vary. "Perfunctory models" are designed primarily to satisfy the monitoring requirements of funders. "Research models" concentrate on hypothesis testing and theory. "Utilization models" focus on use by the major stakeholders. The point here is that the purpose and the approach should be clear. Consequently, the function of this study also falls into three parts:

1) As an initial indicator of the multivariate characteristics of clients entering work experience. At this point the collection of the data and the accuracy of the data is critical for a reliable baseline summarization of the population served.

2) As an overview of the multiplicity of barriers confronting this population in achieving self-sufficiency through the process of work experience. Again, the accuracy of tracking and summarizing these developments is paramount.

3) As an impact assessment of work experience on program participants and of program variables on work experience itself. The analysis and interpretation of the outcome data deserve examinations, explanations, and inferences about the sample served.

WHO:
DEMOGRAPHICS AND ATTITUDES

AGE: The range of the age of the clients was from 17 to 63 years with a mean (average) of this sample at 35.6 years. This figure is similar to other national studies on the homeless.

GENDER: Although work experience is purported to favor single males without children, the gender distribution in this sample closely paralleled estimates for the larger homeless population. One hundred eighteen males (81.9%) and 26 females (18.1%) participated.

RACE: The racial breakdown is as follows: White, 56.3%; Black, 36.1%; Hispanic, 5.6%; and Native American, 2.1%. Again, this is not dissimilar from national percentages.

MONTHS HOMELESS AT INTAKE: The range of this variable is from one month to 96 months and the median (not the mean) is four months. Another more important statistic is that 81.4% of the participants were homeless for 12 months or less.

PLACE OF RESIDENCE AT INTAKE: This variable proves interesting as to who was available or capable of participating in work experience. Shelter residents accounted for 43.8% of the sample while those involved in Transitional Housing (24.3%) or Residential Programs (11.8%) comprised an additional 36.1%. Thus, a full 79.9% were involved in at least some stage of housing beyond the streets, the outside, or automobiles.

RECEIVING ASSISTANCE AT INTAKE?: The Twin Cities appears to have a reputation as an "easy" area to access various forms of public assistance. Yet only 65 clients (45.5%) indicated that they were receiving assistance of some sort while 78 (54.5%) reported receiving no assistance. This would seem to show that expectations of large numbers of recent arrivals receiving assistance and then entering this program were unfounded.

CLIENT EVER ABUSED?: Of the 117 valid cases, 30 participants, or 25.6%, reported that they had been abused. Since about 80% of the clients were male, this figure at first seems large since men, especially from this sample, might be more reticent to report abuse.

MONTHS SINCE LAST STEADY JOB: Because of the large number of extreme responses (16), ranging from 72 to 200 months, this variable is problematic. The usual mean is 26.1 months, but by deleting the extremes this adjusted mean becomes 12.9 months. At this point the median is a more helpful statistic at 10 months. Perhaps a more understandable result stems from categorizing the months into years. Thus, 57.8% reported a steady job within the last year, 14.6% between one and two years, 9.1% between two and three years, 2.8% between three and four years, 4.9% between four and five years, and 11.1% five years or over.

LEVELS OF EDUCATION: Ninety percent of the homeless sample had received at least some high school education and seventy percent had received their high school diploma or GED. All clients were given a reading test with a range from 0 to 26. The mean was 20.2 and comparatively the highest average of two other human service programs researched. This sample is clearly better educated and more literate than might at first be assumed.

ATTITUDES AND VALUES: Two instruments were utilized in assessing the attitudes and values of this sample and those results were then compared to an employed, non-homeless, staff sample.

First, Self-Assessment Scales were administered in strict anonymity and scored as ordinal variables. Correlation and Factor analyses were then used on the data in determining the results. Assumptions are that at-risk populations exhibit overall a low degree of self-esteem. However, the homeless sample appears to view themselves as good and reliable workers with scores similar to the staff sample. In addition, the homeless individuals entering work experience, frankly, seem to feel good about themselves. While the homeless might show a good work ethic and positive traits of self-esteem, a pessimistic, almost nihilistic, view of the direction of their lives is pervasive. Whether that positive self-image is born of the self-centeredness of crisis, the defensiveness wrought from the denial of chemical use, the confidence gained from survival on the streets, or other circumstances is impossible to ascertain. More importantly, in spite of the self-esteem issue, the analysis revealed very different scores on Sociability between the homeless and non-homeless samples suggesting that the homeless view themselves as asocial and outside the mainstream of society. The homeless sample may have a positive self-image, but that is not translated into social relations and this supports the notion of social disaffiliation. The homeless seem to be isolated, individualistic survivors with a pessimistic world-view. And their relation to their world, their circumstances, and the people around them does not seem to be based upon kindness, or openness, or closeness, but more likely upon who they eat with, drink with, or travel with. Views of social relationships do not seem to be based upon vulnerability, but upon activity--not upon disclosing, but upon surviving.

Second, a "Pie of Life" exercise gathered information on how individuals perceive their life priorities and their self-reported behavior with respect to those declared priorities. A comparison of the priorities of the two samples shows that there is very little difference between the homeless and the non-homeless in the ranking of their respective priorities. The differences surface with respect to how the two samples spend their time and energy. Not surprisingly, for example, for the homeless sample "Housing" gained increased importance, while "Partner" disappeared entirely from the list. A comparison of the mean of the differences between the two samples reveals one glaring detail, namely, for the homeless sample the "Self" was the most out of balance variable in light of declared priorities and declared activities. This seems to indicate a group confronted by external circumstances that continually detract from concern for the individual self. The fact that the priorities of the two samples were so close suggests that the hopes and ideals show a theoretical coherence in lifestyle aspirations. Everybody, it seems, wants to take care of themselves, stay healthy, and have a family. But the differences in housing, recreation, partnership, self, and overall balance show that the actual lifestyle activities are quite disparate.

HOW:
PROCESS CHARACTERISTICS AND ISSUES

THE EDUCATION ISSUE: The fact that 29.4% of the sample was without a diploma or GED remains. Consequently, GED/ABE services were offered to all program participants with up to eight hours per week paid at their work experience rate. Twenty-two clients, or 15.3%, took the TABE test, the first step in the process, but only seven, or 4.9%, actually enrolled for classroom training. The numbers were very disappointing to program staff considering that a paid incentive was in place. Anecdotal evidence from the sample is suggestive. Some clients felt that the diploma or GED was unnecessary for their livelihood. Others, especially those with self-reported or observed learning problems, realized, probably correctly so, that little could be accomplished given the time constraints of the program. Still others, especially the

older adults, considered the prospect of classroom training too intimidating. This issue, then, continues to be difficult to address.

THE WORKSITE ISSUE: The worksites were generally divided into two categories: 1) the "Core" worksites that specialize in work hardening, Goodwill/Easter Seal and the St. Paul Rehabilitation Center, or that offered desk clerk positions, the Union Gospel Mission; and 2) the "Scattered" worksites around St. Paul that encompassed varied forms of job descriptions. Placements at these different types of worksites were virtually even with the Core sites accounting for 64, or 47.1%, of the participants and the Scattered sites accounting for 72, or 52.9%. One of the largest correlation coefficients in the study emerged from the crosstabulation of the type of worksite with the outcome of work experience. Fewer positive (or more negative) terminations occurred at the Core worksites than expected and more positive (or fewer negative) terminations occurred at the Scattered sites than expected. However, except for the Union Gospel Mission, the Core worksites were more likely to service those clients most in need of work hardening. This, in turn, helps explain, tautologically, that the "higher-risk" clients were placed at Core sites and since they were "higher-risk" were more likely to terminate negatively.

THE RE-ENTRY ISSUE: Statistics for ex-offender status are notoriously skewed considering the general social undesirability of felony convictions. Self-reported information in this area can be tested against official records to find the extent of the error, but in this program such information was not available or sought. Consequently, under-reporting may be assumed. Even so, 49, or 34.0%, of the participants reported ex-offender status, understood to mean conviction, not arrest, for a felony, not a misdemeanor. This, then, would seem to be a major barrier to employability. However, re-entry did not seem to effect a positive or negative termination from work experience. This is not to say that the ex-offender status was not a problem during work experience. The issue, rather, seemed to be one of sociability and the failure to realize that acquired prison skills do not translate easily into social and employment skills.

THE RAISE ISSUE: As an incentive (and reward) mechanism, at the two month mark each individual receives a raise in pay. Although only $.50 per hour, the net amount for most participants reaches $40 per pay period--not a small sum. Seventy-six, or 68.5%, actually received the raise with 35, or 31.5%, failing to successfully complete the program for the required two months. The correlation between the raise and termination from work experience is both positive and relatively strong. This does <u>not</u> imply that a raise is causative for a positive work experience termination, only that those receiving a raise were more likely to term positively. Of the 99 valid cases (no observations with missing values for either variable), 46 both received a raise and were positive terminations. This accounts for 71.9% of all individuals who received a raise and 86.8% of all individuals who were positive terminations. These figures are powerful and strongly suggest that a raise in pay serves well as a program incentive.

THE MI BARRIER: The issues of mental health and homelessness remain closely related. Some commentators suggest that upwards of 30% of the homeless suffer some form of mental illness and that this is, in part, a consequence of the deinstitutionalization of the mentally ill and the inadequacies of community health services and follow-up procedures. The frequencies from the work experience results were not nearly as high. Only 9.0% self-reported any mental health issues and only 18.1% exhibited mental health concerns during work experience. Part of the explanation for these lower figures stems from the work evaluation portion of the entire process. Clients with serious mental health issues would have been targeted for other support services, such as sheltered workshops, and would not have been enrolled into work experience. Even so, the cumulative percentage of participants reporting and/or exhibiting mental health problems reached 21.5%. Mental health assumes a critical role in the program from the work evaluation through the worksite placement and continues to be a major barrier.

THE CD BARRIER: Similar to the mental health issue, chemical dependency has received considerable attention with respect to the homeless population. Percentage estimates for homeless individuals who are chemically dependent parallel the 30% figure for mental illness and, indeed, a one-third chemically dependent, one-third mentally ill, and one-third "other" serves as a "rule of thumb" for many human service providers. Frequencies from the homeless sample show that 36.8% self-reported themselves as chemically dependent and 32.6% had chemical issues surface during work experience. But the most important and startling information gained in this section stems from the frequencies in the combined variable. Seventy-nine clients, or 54.9% of the total sample, self-reported chemical dependency issues and/or were severely impaired during work experience by chemical use. The seriousness of this issue can hardly be exaggerated.

HOW WELL:
OUTCOMES AND PREDICTORS

As of October 1, 1990, 132 clients had been terminated from work experience. Seventy seven, or 58.3%, of those terminations were positive and 55, or 41.7%, were negative. Of those 77 positive terminations, 46, or 59.7%, were placed in competitive full-time jobs. The average (mean) of the starting salaries for these 46 individuals was $6.83 per hour with 72.5% of the positions involving benefits (usually medical). The range of the salaries was from $4.00 to $16.32 per hour, but the extreme of the top figures demands some adjustment. A 5% trim of the extremes in the data gives a mean of $6.50 per hour, but an adjusted mean wage of $6.26 per hour becomes more usable. A surprising number of variables related well to Wage and provide insights for job placement possibilities. Worksite emerged as an important variable since more clients than expected from the Core worksites were placed in positions toward the lower end of the wage scale. Also, more clients than expected from the self-reported chemical dependency variable showed up at the top end of the scale. Considering the seriousness and commitment of those individuals coming out of treatment, this figure is not surprising. However, the largest impact on the wage scale came from two other variables. Months Homeless had a negative linear correlation meaning that as the wage increased the number of months homeless decreased; or conversely, as the number of months homeless increased the wage decreased. And the corollary to this observation involves the amount of time away from a steady job. Months Since Last Steady Job had a relatively strong negative coefficient meaning that as the months away from a steady job increased, the wage decreased. The implications are clear. The longer a person is homeless and/or without a steady job, for whatever reasons, the less their likelihood of acquiring a living wage.

Discriminant analysis is a sophisticated statistical procedure used primarily to distinguish between groups having a dichotomous outcome and to subsequently predict further group membership. A conclusive Discriminant analysis, at the minimum, is parsimonious in reducing the variables, has much between-group variability, and results in the best classification percentage. In this study all the variables were entered into the analysis using the Wilks stepwise method in order to classify the cases with respect to the outcome of work experience, that is, positive or negative. Variables remaining in the equation, then, can be assumed to be "good" predictors of the outcome. The fourth analysis, with a correct classification percentage of 72.52%, stands out as the final key for a thorough understanding of the various effects on work experience. The best model for predicting the outcome of work experience was contained in this analysis and includes, in ascending order of importance:

> MONTHJOB: Not only does this variable adversely effect the acquisition of a living wage, but the longer an individual is away from a steady job, the better the likelihood of a negative termination from work experience.

RACE: The figures show that more Blacks were in shelters than expected and fewer involved in Transitional housing--the next step up in the housing stabilization process. The housing issue, then, makes this predicto: more understandable.

MIOBSERV: The importance of this variable, affecting almost 20% of the sample even after the screening of the work evaluation, remains evident.

HSGED: If any added confirmation is needed as to the importance of the high school diploma or GED in the world of work, the presence of this variable as the second most important predictor should be satisfactory.

CDOBSERV: Once again, this variable, which is so important from the first intake through the work evaluation and into work experience, plays a primary role in the life of the homeless program--and the lives of so many of the participants.

RECOMMENDATIONS AND CONCLUSIONS

This program works. An important human service has been delivered in an imaginative, caring, and forthright manner that deserves emulation. Work experience works. A crucial aspect of the program has been the time, training, and payroll provided through work experience. Implications for future service are as follows: 1) The pre-assessment period to work experience has been crucial in determining client abilities, needs, and barriers. 2) The activity and availability of the case managers has dramatically enhanced the success of work experience. 3) Drug, alcohol, and mental health referrals have been common and constructive to the program and clients alike. 4) Job-keeping and job-seeking efforts have been an essential and vital part of the life skills group. 5) An educational component should be part of every Employability Development Plan (EDP) contracted with the case manager. 6) The sociability issue needs to be addressed in housing, at the worksite, and during the life skills groups as a support service.

Work experience seems ideally suited for the homeless population in that it provides sufficient time for barriers to surface and to be addressed, enhanced activities to promote practical and immediate concerns, and a remunerative structure to sustain the participants in their everyday lives. In the larger scope of this program, work experience has been supported and augmented by a clear focus, a deeper understanding of the population, and a case managed perspective with adequate support services.

The results from Saint Paul bring out the best in work experience and the best in case management. No wonder that it seems to bring out the best in the clients themselves.

BOUNDARY AWARENESS IN TUTOR-STUDENT RELATIONSHIPS: A PROBLEM FOR RESEARCH-TO-PRACTICE FRAMEWORKS

John M. Dirkx, Tedda Fonfara, and Kay Flaska[1]

ABSTRACT. Volunteer tutors who provide adult basic and literacy education services often work within the context of individualized relationships with adult learners. This relationship is often identified as one of the most powerful dynamics in the teaching process. Despite this observation, however, most training materials and methods provide little if any assistance in learning to cope with and manage these potentially powerful emotions. Tutors need to learn what is and is not within the scope of their roles, particularly as it relates to the psychosocial aspects of this relationship. This paper discusses the nature of this problem, how it is manifested within the tutor-student relationship, and approaches to helping tutors develop increased awareness of the boundaries of their role. The discussion is located within the concrete experiences of an individual learning to become an ABE tutor.

> "...cooperation is based on consciousness and separateness... one must have an awareness of boundaries in order to communicate with others".
>
> (Phillip Slater, 1966)

To be effective, volunteer tutors need to understand and communicate with the adult learners with whom they work. Authentic understanding and communication require tutors to enter into the lives of their learners without losing a sense of who they are and what their role is. This problem, which we refer to as boundary awareness, confronts virtually all practitioners who, to provide their services effectively, must develop relationships with clients. In this paper, we focus on the experiences of an individual learning to become a tutor for adult basic and literacy education (ABLE). The issues and questions raised, however, are relevant to all forms of practitioner-client relationships in adult and continuing education practice. What follows is a discussion of the problem of boundary awareness as it is manifested within the ABLE tutor-student relationship, approaches that can be used to facilitate its development among practitioners, and the implications that this problem holds for training and for collaborative work between research and practitioners.

DESCRIPTION OF THE CONCERN

Despite varying practice contexts, the tutoring process in most ABLE programs is characterized by one-to-one interactions and relationships with adult learners. Experienced teachers and tutors will invariably point to their relationships with students as one of the most powerful dynamics of the learning process for both practitioners and learners. Although a few authors have called for tutor training in interpersonal relations and understanding of the adult learner (e.g. Cookson, 1987; Ilsley & Niemi, 1981), most training materials focus on concerns such as diagnostic testing, teaching strategies (Rosenthal, 1987), preparation of

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materials, and methods for teaching reading (Rossman, Fisk, & Roehl, 1984). In addition, few studies have focused on the social contexts of learning in ABLE programs, the dynamics of tutor-student relationships or how practitioners come to understand their relationships with learners.

Thus, individuals who volunteer to tutor ABLE students have access to assistance in the technology of providing services to ABLE students but precious little help in coping with the powerful dynamics of the tutor-student relationship. As they work with learners, however, they quickly find themselves drawn into a relationship that is characterized more by its psychosocial nature than by its emphasis on basic skills. Many of their learners work to improve their reading, writing, computing, and other basic skills within a context of poverty, physical and emotional abuse, dysfunctional families, and severe health problems. Tutors find themselves having to make choices between helping a learner work on a math problem or listening to a story of physical abuse from last night or last year. Out of empathy, they often feel drawn towards their learners, wanting to help but not knowing whether they should, to what extent, or how. To cope with this dilemma, many tutors may unwittingly either avoid dealing with this psychosocial content altogether or find themselves pulled deeply into their students' lives in ways that make it difficult to extricate themselves. Both situations carry the potential to be emotionally dangerous, the former for the learner and the latter for the tutor as well as the learner.

THE PROBLEM OF BOUNDARY AWARENESS IN ABE PRACTICE

To tutor ABLE students requires individuals, to some degree, to enter their worlds. Tutors need to be able to understand what learning means to learners and to relate the content to their individual lives in meaningful ways. As individuals allow themselves to enter and are allowed to enter the lives of their learners, they are often confronted with powerful psychosocial and emotional dynamics, both within the relationship and within themselves. They may not be prepared to cope with the emotional arousal these dynamics can create. We all have our own emotional needs and it is not difficult to imagine how the psychosocial context of the tutor-student relationship can quickly draw us in over our "psychological heads".

The specific nature of the problem of boundary awareness can best be demonstrated by a short vignette drawn from one of the authors' experiences in learning to become an ABE tutor. The following synopsis is derived from Tedda's tutoring journal.

> I was covering a reading exercise with a small group of ABE learners. I had been working with this group for only two sessions but I felt we had already developed some good relationships. One of these students, Kim, had been in the country for only two months. While I was working with her on reading comprehension, she mentioned to me that she needed medical attention. She wanted me to find a doctor that would see her and would accept Medicare. She also asked me if I would drive her to the doctor's office.

This short vignette illustrates the core of the boundary awareness problem. What should the tutor do in this situation? How should she respond? Should she fully comply with the request, modify her response, or refer the learner to another agency or person for help? On what basis should her response be formulated? This, then, is essentially what we mean when we refer to the problem of boundary awareness. It is an explicit recognition of the "boundaries" of one's roles, a set of beliefs, values, assumptions, and feelings which allow us to decide what to do or not to do within the context of a particular social role. Boundaries are associated with the psychosocial identity of the person filling the role and the person's

ethical and moral beliefs. In this sense, boundary awareness is intimately tied up with the tutor's own self awareness and self knowledge.

In other words, boundary awareness reflects a state of consciousness within the context of interpersonal or group relationships (Slater, 1966). To the extent that boundary awareness exists within a social relationship, the individual ego is differentiated from its social environment. The ego knows what is "I" and what is "not-I". This means that the individual is relatively liberated from the thought and will of others (Piaget, 1932). When boundary awareness is present within a relationship, attachment is conscious and is based on a recognition of differences between the "I" and "not-I". There is a clear sense of role identity - "As an ABE tutor I am this and not this". The scope, responsibilities, and expectations of one's role are more defined.

The blurring of boundaries within a relationship occurs when the individual experiences reinforcement from the other of feelings, impulses, and fantasies of which he or she is not fully conscious. For example, a tutor may have an unconscious feeling of needing to be needed. If an ABE student acts in ways to reinforce that feeling, the tutor may experience an inability to distinguish aspects of himself or herself from that of the learner. The blurring of boundaries then leads to difficulties in making choices regarding what is appropriate and what is not appropriate within the context of the relationship ("I" and "not-I"). Deciding what is and what is not within the scope, responsibilities, and expectations of one's role becomes arbitrary and subject to unconscious feelings and emotions arising within the tutor.

Another vignette taken from Tedda's journal illustrates how boundaries can become quickly blurred and what results as a consequence of this blurring.

> I was working in Kay's classroom at Sacred Heart with a Vietnamese family who were coming in the evenings to improve their language skills. As we worked together, a trusting relationship developed between the family and myself. Medical problems experienced by the mother eventually prevented her from coming to the site and arrangements were made for me to tutor in their home. This arrangement appeared to work out well for everyone and I grew very close to the family. But with this friendship, I had to continually struggle with guiding them to independence and away from dependence on me. Stemming largely from cultural tradition, they wanted me as a sponsor and to socialize with them as well. At one point, they asked if I would co-sign a loan for a car. When I said no, they were extremely subdued, telling me they could be trusted. In consultation with Kay and John, I decided that it would be best to discontinue my tutoring in their home. They pleaded with me to not stop coming. They've called my house, telling me that they miss me terribly, inviting me out for ice cream, and asking when I can come again. Their calls have made me feel guilty for not calling them, even though I know it is not warranted.

Tedda's experience with the Vietnamese family illustrates what can happen when boundaries within the tutor-student relationship become blurred. As she began to work with the family, the relationship appeared to be working well. The learners were happy to make progress towards their goals and felt Tedda was instrumental in that progress. In turn, Tedda experienced the warmth of their appreciation for her assistance. At first, it was not hard to determine what she should be doing as a tutor. She felt comfortable in the evolving mix of both academic and social qualities that characterized her relationship with the family, a mix endorsed and modeled by her cooperating teacher. Gradually, however, the requests for assistance by the family began to change. Fueled, perhaps, in part by a sense of social isolation in an

overwhelming white, middle-class community, the family began to view her more and more as a friend and a social contact.

A former elementary school teacher, Tedda now found herself in an unfamiliar "teacher-student" relationship. Previous experiences and training had not prepared her for the emotional forces in which she was bound up. As she continued to tutor in the family's home, previously delightful experiences, such as afternoon tea with the family, now began to be a source of anxiety for her. Had she taken the social dimension of their relationship too far? Had she crossed over an invisible line where she was no longer a tutor to the family but something else? For Tedda, the family's request for her co-signature on a car loan was a critical event in her relationship with them. Clearly, this request was outside her role as an ABE tutor but, by this time, the family no longer saw her merely as a tutor. Despite the nature of the request, the decision was not easy for Tedda because she knew that the family would be hurt if she said no. The pain and hurt they felt when she did refuse was from the feeling that their friend did not trust them. These feelings were further exacerbated by her unwillingness to see them socially. What began initially as a relatively enjoyable and fruitful relationship between the tutor and the family gradually evolved into something quite different. In pulling away from the family, the tutor was saddled with feelings of guilt. In turn, the family felt she was abandoning them and they were hurt and disappointed by her withdrawal.

Because of a lack of research in this area, it is difficult to say with certainty if Tedda's experience with this family is representative of the emotional forces that can arise within the tutor-student relationship. We can say, however, based on our own experiences as ABE tutors and teachers, the vortex of emotional dynamics represented in this vignette do not seem unusual.

For example, in thinking about this problem for this paper, Kay recalled an experience several years ago with a young woman whom we will call Betty. Betty was a young American woman enrolled in one of Kay's ABE classes. She came to class full of enthusiasm, spark, and anticipation, a diamond in the rough - brilliant, yet with some raw edges. Her initial progress was rapid and she passed three of the tests for her GED in a relatively short period. Then, however, her progress slowed considerably and her once shiny face grew dull and gray. Drawn to her by this change in behavior and appearance, Kay approached Betty in private one evening to try to learn more about this dramatic change. As she talked with Kay, Betty began to cry. She talked and cried and talked of her father's drinking and subsequent verbal abuse of her mother and herself. Feeling attached to the woman, Kay tried to rescue her by calling the authorities for help. Betty would not let her do this, reminding her that she trusted Kay. She did agree, however, to attend Al-Anon. Soon thereafter the family moved away. Although Betty wrote Kay for a time, the family moved again and the letters gradually stopped coming. Betty left no forwarding address but she did leave Kay with feelings of emptiness and sadness.

For Kay, the lesson was critical. She wanted to jump in and save this young woman because she clearly saw what needed to be done. What Kay saw Betty needing was not what Betty wanted. Because Kay became too involved, she lost her perspective and did not wait to ask Betty for help. She tried to take control of Betty's life, which Kay perceived to be out of control. Betty reminded Kay that their relationship did have boundaries and a learner's life is their own. Although we can enter into the life of another for purposes of understanding that life, we can never take an active part in it. The decisions are the learner's to make.

Thus, even experienced teachers are subject to the emotional pull of the practitioner-client relationship. It can exert a powerful influence on the seasoned as well as the novice. We all have much to learn from those with whom we work.

APPROACHES TO DEAL WITH THE CONCERN

The formation of boundary awareness is a task that is associated with socialization into any practitioner role. Because of the breadth and depth of need represented by the learners and the ambiguous and uncertain nature of practice within an ABE context, however, the formation of boundary awareness represents a distinct challenge for individuals learning to work in these settings. In addition, boundary awareness presents unique problems for individuals learning to become an ABE tutor. While many other practitioner roles often are acquired through months or years of training, the tutor often enters the lives of his or her students with relatively little, if any training for this role. This lack of preparation is of particular concern when tutors are faced with difficult psychosocial and emotional issues within the context of their relationships with adult learners. Effective training approaches need to be identified that facilitate the development of boundary awareness among tutors and assist them in making decisions regarding the scope of their roles.

THE PRACTICE-TO-RESEARCH-TO-PRACTICE FRAMEWORK

In reality, the research-to-practice link is often translated as "practice-to-research-to-practice". That is, in professional disciplines, such as education, research often begins with a perceived practice problem. This problem can then become the focus of theoretical and conceptual research which, hopefully, will result in an enhanced understanding of the problem and reasonable suggestions to address it in practice. This framework describes the collaborative relationship that was set up to address the problem of boundary awareness within the context of learning to become a tutor.

Although a former elementary school teacher, Tedda quickly discovered a need to establish processes for helping her deal with the complex array of difficulties with which she was confronted in the ABE classroom. To assist her in the developmental process, she established mentoring relationships with both the teacher in charge of her classroom (Kay) and a supervisor (John) from the graduate program in Adult and Continuing Education at the university. Through these relationships, several strategies were identified to deal with the issues arising in her work, especially the problem of learning what to do and not to do as an ABE tutor. First, Tedda kept a journal of her tutoring experiences. Journaling has been demonstrated to be a potentially powerful vehicle for developing a reflective stance towards one's teaching (Lukinsky, 1990). Tedda used this journal in two fundamental ways: 1) To record her observations of learner behaviors and teaching-learning transactions that were of interest to her; and 2) To reflect on the meaning of these observations to herself and to the learners with whom she worked. This reflective journaling also involved the establishment of a kind of dialogue with herself regarding aspects of her tutoring experiences that troubled her. The journal was also a way for her to communicate with the university supervisor about her experiences within the ABE setting.

Tedda also spent 15-20 minutes with her cooperating teacher after each tutoring session. Together they would review the evening's work and explore questions and issues that arose during the instructional process. These sessions were both reflective and pedagogical. In addition to helping Tedda interpret and make sense of her experiences, Kay would offer suggestions, based on her years of experience, as to how to manage certain questions that came up in Tedda's interactions with the adult learners. These sessions

served to create a psychological space for Tedda between the evening's experiences and her self, giving her much needed distance and separateness from emotionally laden incidents.

Tedda also met weekly with her university supervisor to review that week's tutoring session. The goal of these sessions was also reflective but here the emphasis was more on enhancing an understanding of her self in relation to the tutoring experiences. These sessions were also used, to some degree, to discuss theoretical or research literature that dealt with the psychosocial dynamics of practitioner-client relationships. Because these meetings usually took place several days after her tutoring session, there was sufficient psychological distance and space to reflect on her own emotions and psychosocial involvement in tutor-student relationships. The central focus of these sessions was the various perspectives that Tedda used to construe meaning of her tutoring experiences. These meaning perspectives (Mezirow, 1991) were informed by numerous assumptions about who she is as a person and how this person is manifest in relationships with others. For example, Tedda worked to identify some of the psychological needs she was trying to meet through tutoring, and how these needs came to be expressed within her relationships with students. In the meetings with the university supervisor, the goal was reflective rather than prescriptive, to make known rather than to advise.

Each of these approaches served to establish and extend Tedda's database regarding her tutor-student relationships. With each tutoring session, she entered with new meanings and questions. As this practice-to-research-to-practice cycle evolved, her awareness of the complexity of these relationships developed. She also gradually grew to recognize her own complicity in the emotional webs in which she became involved.

POSSIBLE PROGRAMMATIC APPROACHES

The central feature of the approach described in the previous section is dialogue, either with oneself, a peer, or a mentor. As this approach suggests, open, nonthreatening dialogue is a powerful means for facilitating the development of boundary awareness within tutor-student relationships. The notion of dialogue can be reflected in activities at the program level as well. Small, informal meetings of tutors and teachers can provide an opportunity for peers to talk about and share relationship issues in their tutoring and teaching. Similar meetings have been tried in other programs with some degree of success (Greater Pittsburgh Literacy Council, 1987; Teal, 1989). In addition, facilitated group experiences have been shown to be quite effective in developing boundary awareness in practitioner-client relationships (Dirkx, 1989). Thus, programs may wish to implement similar experiences for their teachers and tutors. By inviting participation by researchers in the field, programs could also further facilitate research-to-practice linkages related to understanding and improving boundary awareness within the practitioner-client relationship.

In developing approaches to facilitate the development of boundary awareness, program staff should not minimize the idiosyncratic and contextual nature of this problem. What needs to be done to facilitate boundary awareness within relationships must reflect the unique needs of the individual and of the context in which he or she works. It is likely that several approaches may have to be used before tutors can identify the approach with which they are most comfortable.

RECOMMENDATIONS FOR COLLABORATIVE RESEARCH

In addressing the problem of boundary awareness within the tutor-student relationship, the worlds of practice and research were linked. Together, these worlds helped each of the authors develop a more profound understanding of the meaning of this problem for the role of the tutor. For the practitioner, dialogues with a researcher ultimately contributed to an increased sense of self-efficacy in her role as a tutor, while deepening her awareness of the theoretical issues represented by this complex problem. In turn, the researcher developed a greater appreciation for the concreteness of the problem, which, in turn, contributed to a more theoretical understanding of the role of the ABE tutor.

Similar, collaborative research needs to be done in this area. We know precious little about the breadth or depth of the problem of boundary awareness in ABLE. What proportion of tutors experience similar issues in their work with adult learners? How do they cope with these issues? What are the consequences of the various ways teachers and tutors cope with the problem of boundary awareness? Are other issues in the ABLE field, such as high tutor and student attrition rates, related to blurred boundaries within the tutor- or teacher-student relationship? Careful, indepth descriptive studies of teachers and tutors are needed to help us better understand how this problem is manifest in day-to-day lives of practitioners and learners. More valuative studies of methods to facilitate boundary awareness are also needed.

CONCLUSION

The problem of boundary awareness experienced by one of the author's in learning to become an ABE tutor was addressed through the development of a triadic relationship of the tutor, cooperating teacher, and the university supervisor. This relationship and the strategies used to focus on and clarify the problem for the tutor exemplifies the linkage of research-to-practice within the context of a concrete practice problem. The problem was first encountered in the lived experiences of an author learning the role of the ABE tutor. Through reflective dialogues, the cooperating teacher contributed her extensive practical knowledge and expertise in helping the tutor further clarify the experiential characteristics of her role. Dialogues with the university supervisor helped the tutor develop a theoretical understanding of the problem. For example, she recognized the need to view her relations with students as helping relationships. Through this theoretical lens, she came to understand how her feelings about herself as a person became intertwined with her desire to help her students. This served to deepen the tutor's awareness of the link between what one does as a tutor and who one is as a person. With this awareness, the tutor was then able to work with the teacher and the researcher to identify and implement strategies to deal with the problem.

The development of boundary awareness involves learning to differentiate and separate our psychological selves from the lives of others with whom we relate. To the extent that this happens, understanding and being understood by the other person is possible. Ironically, conscious attachment in meaningful relationships requires an awareness of differences - of what makes us say, "This is I. This is not-I". In client-practitioner relationships, this becomes a distinction crucial to effective communication and learning.

LITERATURE CITED

Cookson, Peter (1987). Starting and building a community-based literacy Program in Prison: A Final Report to the National Institute of Corrections. Pennsylvania State University, PA. Eric Document: ED317760

Dirkx, J. M. (1989). Self-reflection in Clinical Education: Using group process to improve practitioner-client relationships Presented at the Annual Meeting of the American Educational Research Association, San Francisco: April.

Greater Pittsburgh Literacy Council. (1987). Tutor support systems 1986-1987. Pennsylvania State Department of Education (ED 289063).

Ilsley, P.J. & Niemi, J.A. (1981). Recruiting and training volunteers. New York: McGraw-Hill.

Lukinsky, J. (1990). Reflective withdrawal through journal writing. In J. Mezirow and Associates, Fostering critical reflection in adulthood. San Francisco: Jossey-Bass.

Mezirow, J. (1991). Transformative dimension of adult learning. San Francisco: Jossey-Bass.

Piaget, J. (1932). The Moral Judgement of the Child. London: Kegan & Paul.

Rosenthal, N. (1987). Teach Someone to Read: A Step-by-Step guide for Literacy Tutors. Belmont, CA: David S. Lake Publishers (pp. 5-6).

Rossman, M., Fisk, E., & Roehl, E. (1984). Teaching and Learning Basic Skills. New York: Teachers College Press

Slater, P.E. (1966). Microcosm: Structural, Psychological and Religious Evolution in Groups. New York: John Wiley & Sons

Teal, P. (1989). Operation storefront: A computer-assisted Instruction Component of the Reading Assistance Program (RAP). Florida: Florida Department of Education.

UNDERSTANDING AND FACILITATING EXPERIENCE-BASED LEARNING IN ADULT EDUCATION: THE FOURthought MODEL

John M. Dirkx and Ruth Lavin[1]

ABSTRACT: Learning from experience is a central philosophical and theoretical idea in the field of adult learning. Despite its long tradition and pragmatic richness, however, the idea is not grounded in a systematic theory or model of how we learn from experience and what it is that is learned. Current efforts which emphasize reflective thinking and critical reflection have contributed to the development of such a theoretical base but are diverse and incomplete. In this paper we discuss a theoretical model for viewing learning from experience in a more holistic manner. The components of this model are trial and error, reflection, creative expression, and discernment. Implications of this model for understanding and facilitating the process of learning from experience and how this model addresses the infamous research to practice gap are explored.

INTRODUCTION

The idea of learning from experience has been the focus of scholarship across many disciplines for many years. Whether we come to know the world through our senses or through our minds was a philosophical debate which raged for centuries (Crosby, 1988). Kant resolved this intellectual impasse by suggesting that the source of order in the world was not external but in the human mind. According to Kant, experience is received through an active structuring mind. The idea that both reason and experience are involved in our coming to know the world was further elaborated in the writings of several progressive educators, including John Dewey (1938), Eduard Lindeman (1926), and Mary Parker Follet (1932). For Dewey and other progressive educators, experience was to be used intentionally to evolve distinctive qualities from an otherwise indeterminate, immediate, and felt quality of experience. Experience was to help us learn about and function more effectively in our world. In turn, these progressivists have shaped the work of several prominent, modern-day theorists of adult learning, including Malcom Knowles (1990), Jack Mezirow (1991), and Stephen Brookfield (1986). Although these scholars differ considerably on a number of important issues about adult learning, they all place considerable emphasis on the importance of the learner's experiences in the learning process.

Thus, learning from one's experiences is an idea that has enjoyed a long and rich tradition within educational scholarship. It is now widely accepted as a key "principle" in understanding how adults learn and is one of the most central ideas in the field of adult and continuing education. It also represents one of those few ideas that provides a promising basis for bridging the oft cited gap between research and practice.

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PRACTICE IN SEARCH OF A THEORY

Despite its enduring philosophical roots, however, and its theoretical richness, learning from experience is a practice phenomenon that has received little systematic and critical study by either theorists or scholar-practitioners in the field of adult education. How this centrally important idea is glossed over by many in the field is illustrated in Stewart's (1987) intellectual biography of Eduard Lindeman. Arguably more than any other scholar in the field, Lindeman stressed the importance of experience in adult learning. Even though Stewart devotes an entire chapter to this very question, the reader leaves this work with no clear theoretical understanding of what learning from experience meant to Lindeman, what it is that is learned through this process, or a theoretical view of how this form of learning takes place. Current scholars, such as Knowles and Brookfield offer little beyond repeating Lindeman's original dictum: "the highest resource of value in adult education is the learner's experience" (Stewart, 1987, p. 103).

In a critique of the Experiential Education Movement, Wichman (1988) points to a lack of rigorous research in the field and a reluctance among those committed to experiential forms of learning to engage in serious philosophical and theoretical exploration. This has had the effect of restricting a more multi-dimensional and holistic view of learning from experience. According to Wichman (1988), this lack of willingness to seriously reflect on and theorize about experience-based learning has led to the "learning by doing heresy" and its syndromes: 1) the blind faith syndrome; 2) the cookbook syndrome; and 3) the process-centered syndrome. That is, facilitators using experience-based learning accept experiential activities as inherently good, focus on the development of specific "how-to" procedures, and emphasize activities rather than outcomes. In the words of one experiential educator, this means, "Let the mountains speak for themselves" (Nold, 1977).

The conceptual meaning of the idea of experience-based learning remains illusive and many practitioners are not clear on what specific approaches to use to facilitate this form of learning or when to use them. As a result, for participants in adult education programs, experience-based learning is often more a promise than a reality. According to Wichman (1988), "What is needed now is the development of specific theories of experiential learning and instruction based upon a general philosophy of experiential education" (p. 71). An obviously central component to this theory-building is an attempt to understand how learning from experience occurs and what it is that is learned in the process.

While the preceding critique portrays learning from experience as an aspect of practice intellectually barren of research and theory, there has been a small but concerted effort recently to address the questions of what experience means within a theory of adult learning and how adults learn from experience.

RESEARCH ON THE PROCESS OF LEARNING FROM EXPERIENCE

Similar to the more pragmatic literature which largely precedes it, theoretical and conceptual work on learning from experience reflects a heterogeneous blend of perspectives. These perspectives, however, can be grouped roughly into two larger orientations: 1) Perspectives oriented to the individual and grounded in a more humanistic view of the learning process; and 2) Perspectives oriented to the learner's socio-political context and grounded in a more sociological view of the learning process. A third group of studies reflect more of a focus on developing a theoretical basis for facilitating the process of learning from experience.

Research which exemplifies the first orientation tends to focus on the individual learner, the subjective meaning of his or her experiences, and how this meaning is derived through the learning process. Within

this orientation, it is possible to identify at least two subgroups of research thrusts. The first of these subgroups relies on a cognitive formulation of the problem and emphasizes the process of deriving meaning from experience as a reasoning skill problem. For this subgroup, the process of reflection occupies a crucial role in the process of learning from experience. Learning from experience as a reflective, cognitive activity is typically conceptualized as a cyclical or phase-like process. Researchers who illustrate this particular approach to conceptualizing the process of learning to learn are Kolb (1984), Cell (1987), Boud, Keough, and Walker (1985a), and Boyd and Fales (1983). Also loosely related to this view are researchers, such as Schon (1983, 1987) and Argyris (1985) who incorporate more of a tacit dimension into the reflective process and who are somewhat less systematic in their description of how reflection facilitates learning from experience. Jarvis (1987) attempts to construct a view of learning from experience located within a socio-cultural framework. His theoretical approach, however, suggests more of an individualistic, humanistic orientation (Usher, 1989). For this reason, he is included in this group.

The second, smaller subgroup of studies tends to be framed more from the perspective of transformations or development of consciousness. Here the emphasis is on learning for self-recognition or self-knowledge, as opposed to the more problem-oriented focus of the first humanistic subgroup. Learning from experience is a way to learn about one's self and the relationship of the self to the broader society of which it is a part. These views of experience-based learning are often informed by either adult development theory and/or depth psychology. Examples of researchers exemplifying this approach to learning from experience include Torbert (1972), Daloz (1986), Boyd and Myers (1988), Boyd (1991), and Boud & Walker, (1990). Also closely associated with this perspective, although somewhat different in their theoretical views, are certain feminist scholars who work from a developmental perspective, such as Belenky et al (1986).

The second major orientation to learning from experience that we have identified addresses the question of how adults learn more from the learner's socio-political context. These authors stress more the role of context in the process of learning from experience and the need to view multiple construction of realities before knowledge can be brought to bear on a specific problem. For educators in this orientation, experience and learning are not regarded as neutral and what is to be learned cannot be considered outside of the social relationships in which experiences occur. Analysis often focuses on the relationship of various social structures to the distribution of power among groups. The aim of facilitators working from this perspective is the transformation of meaning perspectives and/or the development of critical consciousness among their learners. Examples of scholars who have addressed the question of learning from experience from this orientation are Freire (1971), Cunningham (1983), Carr and Kemmis (1986), Usher (1985, 1986, 1989), Weedon (1987), Mezirow and Associates (1990), and Mezirow (1991).

In addition to these more conceptually oriented studies, a few researchers are attempting to ground the process of facilitating learning from experience in a more theoretically oriented view of learning from experience. These works typically represent a mixture of both attempts to explain or understand the process as well as prescriptions for practice. Examples of works in this group are Walter and Marks (1981), Boud, Keogh and Walker (1985b), Schon (1987), and Mezirow and Associates (1990).

Thus, the small but budding inquiry into how adults learn from experience already reflects a diverse set of perspectives with markedly differing assumptions regarding how adults come to know their world. To the uninitiated, this inchoate chorus of voices can be confusing and disconcerting. It is our position, however, that this diversity of perspectives represents the diverse ways in which adults actually learn from their experiences. In this regard, however, the chorus is incomplete, for it neglects other ways of learning from experience, such as trial and error, creative expression, and discernment, which come to represent

rich sources of knowledge for adults about their world. In the next section, these various perspectives are brought together within a phenomenological model of learning from experience. We refer to this model as the FOURthought model of experience-based learning.

THE FOURTHOUGHT MODEL OF EXPERIENCE-BASED LEARNING

The model builds on and attempts to bring under one conceptual roof many of the theoretical studies regarding experience-based learning mentioned earlier. It is structured around four fundamental ways of coming to know (or "thought") about ourselves and our world from our experiences. These are 1) Trial and error; 2) Rationality/reflection; 3) Creative expression; and 4) Discernment. Trial and error learning stresses the sensate world and coming to know about it through methods which are usually unsystematic, random, and arbitrary. Although learning of this type may be intentional, it is often unintentional and "accidental". Trail and error learning emphasizes instrumental and utilitarian values and is frequently associated with processes of enculturation, socialization, or habituation. For example, in a rush for time and inadequately prepared for a workshop, a facilitator may arbitrarily select an experiential activity to "keep them busy". In implementing this method, however, he or she may learn that it is a powerful tool for developing cooperative interaction. This learning then becomes incorporated into the facilitator's overall instructional philosophy.

Rational and reflective views of learning from experience place emphasis on the learner as a thoughtful, order-seeking agent. There are several versions of this orientation, including scientific problem solving of Dewey (1938), to the humanistic reflection of Boyd and Fales (1983), the reflective practice concept of Schon (1983) and the critical reflection processes of Mezirow (1990, 1991) and others (Freire 1971; Cunningham, 1983; Carr and Kemmis, 1986; Usher, 1985, 1986, 1989; Weedon, 1987) Although these versions reflect important differences in aims, purposes, and methods, they emphasize the role of rationality and systematic reflection in the process of learning from experience and the capacity of the learner to "step back" from his or her experience in order to reflect on and learn from it.

Creative expression views of learning from experience stress the importance of expressing one's creativity as a way of coming to know one's self and its relation to the world. This orientation includes the use of narrative or the telling of one's story" (Polkinghorne, 1988), craft, art, and music, as well as other forms of creative expression. The central premise of this view is that creative expression is a way for deeper part of the psychological self to communicate with its outer world (Neuman, 1979) and to help learners connect with and learn from significant aspects of their life experiences. Although it is intentional, creative expression is guided more by our emotional rather than our rational dimensions. Its manifestation is often symbolic and mythical, rather than logical and concrete. For example, one of the author's, in writing and developing the argument for this paper, experienced a sense of "rightness" about the place and activity of his writing. Although engaged in a reflective and theoretical work, much of the activity involved creative use of ideas and literature. The sense of rightness that emerged reminded the author of what it is that is truly meaningful and worthwhile for him. This is an illustration of how creative expression helps us better understand our selves and our worlds.

Finally, discernment views of experience-based learning emphasize experience as an interior phenomenon (Boyd, 1991; Boyd and Myers, 1988). Approaches to facilitating this form of learning help adults understand and discern the symbolic meaning that particular outer events hold for their inner lives. Like creative expression, discernment focuses primarily on emotional or affective aspects of our experiences. Unlike the reflective/rational approaches, the methods used to facilitate discernment de-emphasize the role of rationality and stress the significance of listening quietly and passively to a deeper source of knowledge

within one's self. Popular manifestations of this approach are journaling of and dialoging with dreams and meditation.

The various components of the FOURthought model are best viewed in a holistic and inter-related fashion. For example, facilitation involves certain performance skills which are sometimes modified through trial and error. More reflective techniques allow us to develop a deeper understanding and meaning of particular aspects of our facilitating. Furthermore, we are often compelled to talk about (tell stories) our experiences as a facilitator, from which we learn more about ourselves as facilitators. Finally, in facilitation practitioner-client relationships often become the context for the expression of powerful emotional forces. These forces sometimes express themselves in symbolic ways. These symbols can be used as a means to access the deeper parts of ourselves and our relationships with others. Thus, these different components can all be manifest within the context of a particular life experience, such as facilitation. The components are also transactional, in that one form of coming to know from experience often influences others.

IMPLICATIONS FOR RESEARCH TO PRACTICE ISSUES

Experience-based learning is a concept and a phenomenon which represents the core of the research-to-practice issue. As a phenomenon, the term refers to the fact that learning takes place within the crucible of our life experiences and cannot be separated from them. As a concept, experience-based learning provides a means of developing a theoretical understanding of how lived experiences influence what is learned and vice-versa. The concept and the phenomenon cannot be understood apart from each other. The FOURthought model provides a framework for deepening our understanding of this inter-relationship. It suggests that experience-based learning manifests itself in several different ways. Each of these forms of learning implies its own way of coming to know. These different ways of knowing, in turn, imply different approaches to facilitating the learning process. Thus, a kind of cyclical perspective of learning is implied by the model. The cycle first starts with observations of the learner in a concrete setting. The framework then provides a conceptual basis for understanding the various ways in which learners express the process of learning from experience, whether it be from trial and error, reflection, creative expression, or symbolic understandings. This model is an expansion of previous theoretical work in the area of experience-based learning. It incorporates previous views into a more holistic approach and adds two additional dimensions - creative expression and discernment - previously overlooked in these studies.

To fully achieve the promise of experience-based learning, adult educators need to develop a full awareness of the depth and complexity of this phenomenon. It is not just trial and error, or reflection, or creative expression, or discernment. All of us, at one time or another have knowingly or unknowingly used all four of these dimensions in our process of learning from our experiences. Similarly, in an attempt to make meaning of their lives, our students move in and out of each of these dimensions. Recognizing what dimension a particular learner or group of learners seems drawn to and being able to facilitate learning within that dimension are critical aspects of an adult educator's role. The FOURthought model of experience-based learning provides a means for researchers and scholar-practitioners to conceptualize this process and deepen their understanding of the complexity and multi-dimensionality of this process.

Collaborative work among research and practitioners is needed to address several questions associated with this model. Studies need to further corroborate the manifestations of the model's various components in the lives of adult educators and their learners. We are also unsure at this point the extent to which this manifestation expresses a kind of preference similar to or different from other issues in the area of individual differences, such as learning or personality styles. Numerous methodological issues also need

to be explored, such as the appropriateness of designing learning activities that encourage learners to explore ways of learning from experience with which they may not be comfortable or familiar.

Experience-based learning is ideal for participatory forms of research, which blend research and practice with the goal of improving learning for our participants and deepening our understanding of what it means to learn from experience. The FOURthought model of experience-based learning provides a framework in which this collaboration can take place.

LITERATURE CITED

Argyris, C., Putnam, R. & Smith, D. M. (1985). Action Science. San Francisco: Jossey-Bass.

Belenky, M. F., Clinchy, B. M., Goldberger, N. R. & Tarule, J. M. (1986). Women's ways of knowing: The development of self, voice, and mind. New York: Basic Books.

Boud, D. & Walker, D. (1990). Making the most of experience. Studies in Continuing Education, 12, 61-80.

Boud, D. J., Keogh, R. & Walker, D. (Eds.) (1985a). Reflection: Turning experience into learning. London: Kogan Page.

Boud, D. J., Keogh, R. & Walker, D. (1985b). Promoting reflection in learning: A model. In Boud, D. J. & Walker, D. (Eds.) (1985). Reflection: Turning experience into learning. London: Kogan Page, pp. 18-40.

Boyd, E. M. & Fales, A. W. (1983). Reflective learning: Key to learning from experience. Journal of Humanistic Psychology, 23, 99-117.

Boyd, R. D. (1991). Personal transformations in small groups: A Jungian perspective. New York: Tavistock/Routledge.

Boyd, R. D. & Myers, J. G. (1988). Transformative education. International Journal of Lifelong Learning, 7, 261-284.

Brookfield, S. (1986). Understanding and facilitating adult learning. San Francisco: Jossey-Bass.

Carr, W. & Kemmis, S. (1986). Becoming critical: Knowing through action research. (2nd ed.). Brighton: Falmer Press.

Cell, E. (1987). Learning to learn from experience. Albany, NY: State University of New York Press.

Crosby, A. (1988). A critical look: The philosophical foundations of experiential education. In R. Kraft and M. Sakofs (eds.), The theory of experiential education (2nd ed.). Boulder, CO: Association for Experiential Education.

Cunningham, P. M. (1983). Helping students extract meaning from experience, in R. M. Smith (Ed.), Helping adults learn how to learn. New Directions in Continuing Education Series No. 19, Sept. 1983. San Francisco: Jossey-Bass.

Daloz, L. A. (1986). Effective teaching and mentoring: Realizing the transformational power of adult learning experiences. San Francisco: Jossey-Bass.

Dewey, J. (1938). Experience and education. New York: Collier Books.

Follet, M. P. (1924). Creative experience. New York: Longmans, Green and Co.

Friere, P. (1971). Pedogogy of the oppressed. New York: Herder and Herder.

Jarvis, P. (1987). Meaningful and meaningless experience: Towards an analysis of learning from experience. Adult Education Quarterly, 37, 164-172.

Knowles, M. (1990). The adult learner: A neglected species, Fourth Ed. Houston: Gulf Pub.

Kolb, D. A. (1984). Experiential learning: Experience as the source of learning and development. Englewood Cliffs, NJ: Prentice-Hall.

Lindeman, E. (1926). The meaning of adult education. New York: New Republic.

Mezirow, J. (1991). Transformative dimensions of adult learning. San Francisco: Jossey-Bass.

Mezirow, J. and Associates, (1990). Fostering critical reflection in adulthood: A guide to transformative and emancipatory learning. San Francisco: Jossey-Bass.

Neumann, E. (1979). Creative man: Five essays. Princeton, NJ: Princeton University Press.

Nold, J. J. (1977). On defining experiential education: John Dewey revisited. Voyageur, 1.

Polkinghorne, D. E. (1988). Narrative knowing and the human sciences. Albany, NY: State University of New York Press.

Schon, D. A. (1983). The reflective practitioner: How professionals think in action. New York: Basic Books.

Schon, D. A. (1987). Educating the reflective practitioner. San Francisco: Jossey-Bass.

Stewart, D. W. (1987). Adult learning in America: Eduard Lindeman and his agenda for lifelong education. Malabar, FL: Krieger.

Torbert, W. R. (1972). Learning from experience: Toward consciousness. New York: Columbia University Press.

Usher, R. S. (1985). Beyond the anecdotal: Adult learning and the use of experience. Studies in the Education of Adults, 17, 59-75.

Usher, R. S. (1986). Adult students and their experience: Developing a resource for learning. Studies in the Education of Adults, 18, 24-35.

Usher, R. (1989). Locating experience in language: Towards a poststructuralist theory of experience. Adult Education Quarterly, 40, 23-32.

Walter, G. A. & Marks, S. E. (1981). Experiential learning and change: Theory design and practice. New York: John Wiley & Sons.

Weedon, M. R. (1987). Feminist practice and poststructuralist theory. Osford: Blackwell.

Wichman, T. F. (1988). Babies and bath water: Two experiential heresies, In R. Kraft and M. Sakofs (eds.), The theory of experiential education (2nd ed.). Boulder, CO: Association for Experiential Education.

ADULT DEVELOPMENT: AN INTEGRATIVE MODEL FOR PRACTICE

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ABSTRACT: An understanding of, and appreciation for, human development generally, and adult development in particular, is an important element in the adult educator's "tool kit." Such knowledge provides insight into the learners' attitudes, expectations of self and of the learning situation, and readiness to learn. Especially during the 1960's and 1970's considerable research was conducted to gain better insight into the developmental course of the adult lifespan. How can the adult educator and practitioner utilize the diverse findings of this research? The purpose of this paper and the subsequent presentation is to propose a model which integrates the findings of studies into adult development and propose uses and implications suggested by that model.

INTRODUCTION

An important area of research which has received considerable attention over the last two decades has been that dealing with the developmental process of the individual during the adult years. While this has been a welcome arena of investigation which has broadened both our understanding of lifelong human growth and our appreciation for the unique aspects, tasks, and struggles associated with the various periods of adulthood, this growing mass of information needs to be reduced to some useable format in order to be readily available and useful to the practitioner in adult, community, and continuing education. How can the large number of studies (e.g., Erikson; Buehler; Neugarten; Peck; Levinson; Gould; Sheehy; Lowenthal, Thumher, & Chiraboga; Fiske & Chiraboga; Loevinger; Kohlberg; Perry; Gilligan; Fowler; among others) be organized in such a way that their accumulated writings and insights might be useful to the practicing adult/continuing/ community educator?

IMPORTANCE

Thanks to the research of developmental scholars and others, persons who work with adults in educational and other human service settings have come to appreciate the variety and diversity of the adult years. No longer is the span of the adult period of life viewed merely as a plateau connecting the ascendency of childhood, adolescence, and youth and the decline of senescence--a plateau once thought to be devoid of much growth and change. However, we must now find ways to bring together these many individual studies with their diversity of detail. The sheer amount of information can become overwhelming and relegate these studies to academic bookshelves and graduate courses on adult development and the adult learner. Practitioners will be able to utilize these various avenues of research as a reasonable base for making informed decisions affecting the actual conduct of their practice only after this mass of detailed information is reduced into a useable framework.

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PROPOSED MODEL

Following the lead of such reporters and synthesizers as Lasker and Moore (1980), Cross (1982), Chickering and associates (1985), and Merriam (1984), the proposed integrative model divides the research of adult development into two categories: 1) age/phase and 2) stage. Table 1 presents descriptive lists which have been developed to outline, in parallel fashion, the major traits or characteristics of each of these categories. Age/phase theories are organized around the metaphors of seasons and life journeys and emphasize environmental influences on the process of adult development. Age serves as a guide for statistically significant groups of the population; generally speaking, a majority of adults enter each phase at comparable ages. They tend to share similar sociological, cultural, and occupational tasks (see Gould, 1978; Levinson, 1978; Chickering & Havighurst, 1981). These studies do exhibit some weaknesses, however: 1) they are restricted sexually, socio-economically, and culturally, and 2) most of them represent work that is now almost 20 years old. They reflect neither significant demographic shifts which have occurred in the last two decades nor increased investigation into the developmental patterns of women. They are useful, however, in highlighting the developmental changes which do take place during the adult lifespan.

TABLE 1
COMPARISON OF PHASE AND STAGE THEORIES

AGE/PHASE THEORIES	STAGE THEORIES
METAPHOR = "SEASONS"	METAPHOR = "POOLS AND DAMS"
HORIZONTAL; CONTINUOUS; RECURSIVE	VERTICAL; HIERARCHICAL; SEQUENTIAL
GENERALLY AGE RELATED/ CHRONOLOGICAL	VARIOUS REACTIONS TO SAME CONDITIONS; NOT BOUNDED BY AGE
SOCIOLOGICAL CONDITIONS: PHYSICAL; SOCIAL; OCCUPATIONAL	PSYCHOLOGICAL STRUCTURE
AFFECTED BY ENVIRONMENT	INTERNAL/INTRINSIC DEVELOPMENT; EPIGENETIC
EMPHASIZES NURTURE	EMPHASIZES NATURE
SIMILAR EXPERIENCES AND DEVELOPMENT ACROSS COHORTS	DEVELOPMENT UNIQUE TO INDIVIDUAL, YET FITS PATTERN FOR SPECIES
UNIVERSAL	INDIVIDUALISTIC
GENERAL CORRESPONDENCE BETWEEN LIFE TASKS AND AGE PERIOD	DEVELOPMENT--->COMPLEXITY, DIFFERENTIATION

Stage theories, in contrast, emphasize epigenetic factors which are grounded in biological conceptions of development. Drawing upon Kitchener (1978), Lasker and Moore (1980) outline the major characteristics of stage theories:

1) Development is internally organized. That is, the emerging processes are guided by an intrinsic system of organization, such as the genetic code. . . .

2) Development proceeds through identifiable stages, and the stages represent discrete and relatively stable developmental plateaus.

3) The direction of development is toward increasing complexity of form and increasing differentiation of parts. . . .

4) At each identifiable stage of development, the organism displays emergent qualities that were not present at the previous stage. . . . Higher stages of psychological development enable persons to function in ways that cannot be anticipated at earlier stages. (Lasker & Moore, 1980, p. 15)

These theories attempt to describe, on a hierarchical basis or mode, the series of personality and cognitive stages through which adults *may* (but not necessarily *must*) pass as they mature. Each stage is, in effect, a psychological set which frames how each adult views the world and perceives oneself in relationship to that world. Unlike phase theories, which tend to be universal, stage theories are much more individualistic. The role of age is that age before which entering a particular stage is usually not possible; however, an adult need not enter a stage at a given age. In fact, stage theorists feel that most adults will never experience all stages. Furthermore, stage theory (again in contrast with phase theory) is more inclusive of all backgrounds.

Stage theorists have developed hierarchies containing six to nine stages which can, for the sake of convenience and the purposes of the model presented here, be grouped into three major categories or levels: egocentric, sociocentric, and allocentric (see Okun, 1984, p. 60). In the *egocentric* stages individuals make decisions based upon the perceived effect of a decision upon the self, e.g., "How can I avoid punishment?" or "What actions will cause others to like me?" Persons in the *sociocentric* stages make decisions based on established group norms, with their rationale for adherence to these norms ranging from a "law and order" perspective on the one hand to the perception, on the other, that the well-being of the greatest number of people depends upon the voluntary submission to accepted community standards. According to stage theorists, the large majority of adults operate at levels which are classified as sociocentric. Finally, a smaller number of adults can be described as *allocentric* in their stage development. These persons are able to subject themselves to what they perceive as the higher good, to universals. They consider these overarching principles so important that personal life and well-being are no longer significant. They are ready and willing to give themselves over to--even to sacrifice themselves for--these ultimate ideals (see Ferro, in press).

These summaries can be transferred to a two-dimensional model, presented in Figure 1, on which the age/phase theories (outlining life events through which most adults pass) compose the horizontal dimension and stage theories (distinguishing developmental levels which are not age related and at which adults may stop for all or a portion of their adult years) the vertical. The unique feature of this model is its attempt to bring both categories of studies (age/phase and stage) into a single framework. The visual impact of such an array highlights the increasing diversity that exists among adults as cohorts grow older.

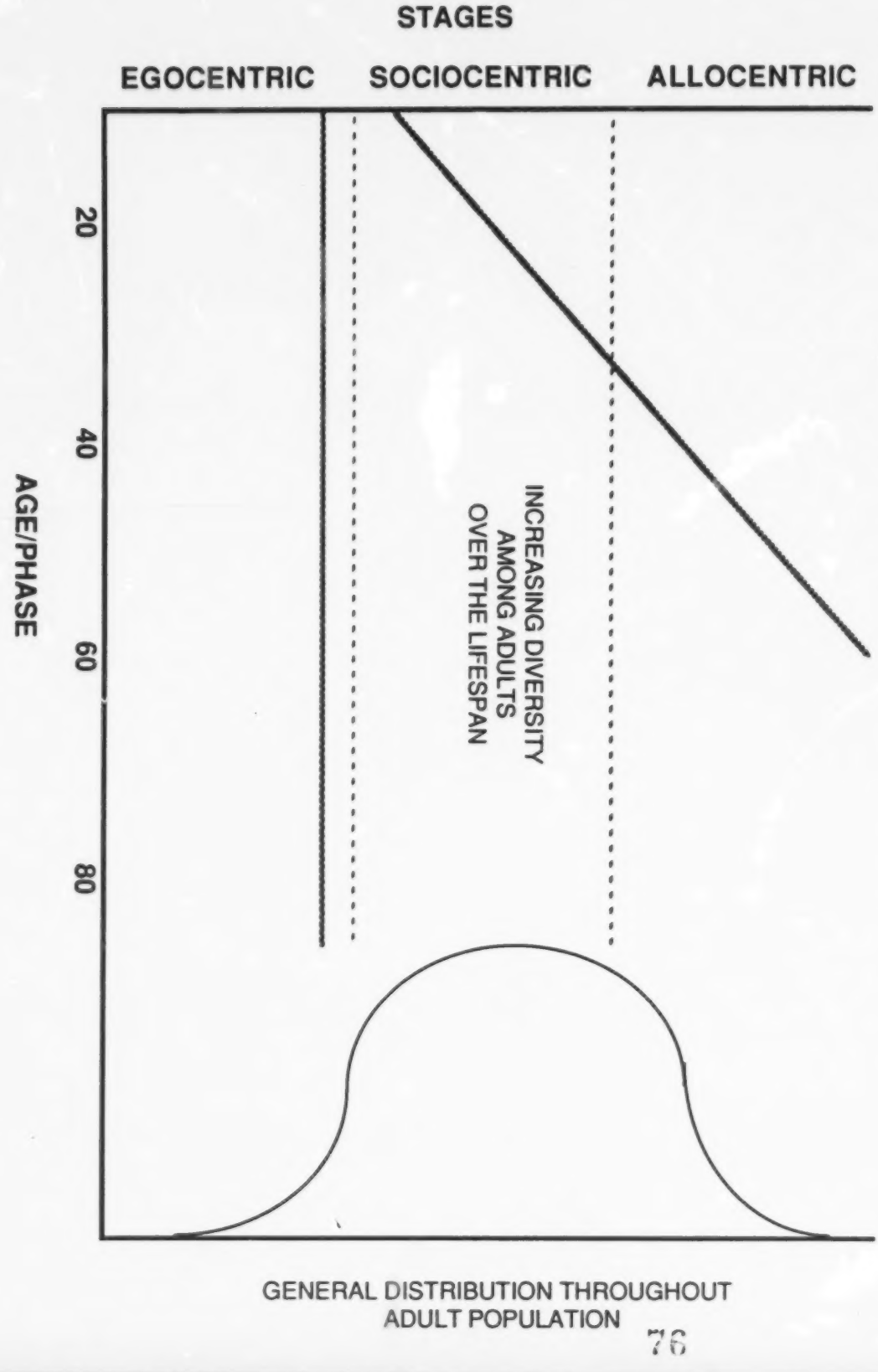

FIGURE 1
ADULT DEVELOPMENT MODEL

At the same time, it illustrates the conclusions of stage theorists that a majority of adults cluster within the sociocentric category, regardless of their age/phase development.

IMPLICATIONS AND APPLICATIONS

The driving force behind the development of this model has been the attempt to integrate a mass of research and theory into a useable model so that what has been learned from these efforts might actually be applied in practical settings. At the same time, the proposed model should raise questions leading to further research as well as provide implications for practice. In fact, insights gained and questions raised can lead to new levels of integrating research and practice by instigating areas of action research in which the actual practice setting now provides the arena for continued testing of the integrative model, the various theories which lie behind it, and new questions which might be raised by its study and use.

Both aspects of this presentation--the comparison and contrast lists and the two-dimensional model--can be surveyed for applications to practice as well as implications for further research. While such model building tends to hide the uniqueness and distinct characteristics of individual studies, it does convert and distill a mass of specific detail, which might otherwise prove of little use and value to the practicing educator, into a reasonable and useable format. Three implications for practice are given here as starters.

Possibly the most obvious conclusion which can be drawn from a brief perusal of the model is the growing differentiation among adults as they grow older. This observation has far-reaching implications for all agencies, organizations, and institutions which are designing programs to reach the adult population. Simplistic efforts do not suffice. For example, "singles groups" do not meet the needs of all singles at the same time (see Merriam & Ferro, 1986). Some are single because they have never married, some are divorced, and others are widowed. Chronological age, the presence or absence of dependent children, occupation, and cultural and socio-economic factors also must be considered. Programs for singles (who, if graphed on the model, would scatter throughout) must be more targeted in order to be most effective and beneficial.

Even more potent are the implications for working with the elderly. Many organizations and agencies make the mistake of attempting to attract all "golden agers" to the same group or program. A quick glance at the model demonstrates that, if stage theorists are correct, this is exactly where the greatest differentiation within the adult population exists; they range from egocentric to allocentric, from hypochondriacs to activists such as the Gray Panthers, from those wrapped up in their self-protective cocoons to those making decisions which affect the world. Both this diversity and the growing numbers of older adults in our population call for--in fact, require--tremendous expansion of programming with and for this cohort.

Another, and possibly less obvious, implication is the warning not to fall into the trap of developing programs geared only to specific chronological groups. Many interests and concerns are not limited to age categories. For example, a widow who is 25 may have more in common with a widow who is 55 than with an unmarried women her own age (Merriam & Ferro, 1986). Males in their middle years who have been laid off from factories and mines are returning to school to take up nursing. They now have more in common with colleagues 20 years their junior than they do with their former peers who spend the day in a bar or hiring hall waiting for jobs which will never again be available.

These three illustrations should, hopefully, whet the appetite and encourage the reader to seek out other possible implications for application to practice and possible avenues for action research.

LITERATURE CITED

Chickering, A. W., & Associates. (1981). *The modern American college.* San Francisco: Jossey-Bass.

Chickering, A. W., & Havighurst, R. J. (1981). The life cycle. In A. W. Chickering & Associates, *The modern American college* (pp. 16-50). San Francisco: Jossey-Bass.

Cross, K. P. (1981). *Adults as learners.* San Francisco: Jossey-Bass.

Ferro, T. R. (in press). The authority of the Word. In P. Jarvis & N. Walters (Eds.), *Theological perspectives on adult education.* Malabar, FL: Krieger.

Gould, R. L. (1978). *Transformations: Growth and change in adult life.* New York: Simon and Schuster.

Kitchener, R.F. (1978). Epigenesis: The role of biological models in developmental psychology. *Human Development, 21,* 141-160.

Lasker, H., & Moore, J. (1980). Current studies of adult development: Implications for education. In *Adult development and approaches to learning.* Washington, DC: National Institute of Education.

Levinson, D. J. (1978). *The seasons of a man's life.* New York: Ballantine.

Merriam, S. B. (1984). *Adult development: Implications for adult education.* Columbus, OH: ERIC Clearinghouse on Adult, Career, and Vocational Education.

Merriam, S. B., & Ferro, T. R. (1986). Working with young adults. In N. T. Foltz (Ed.), *Handbook of adult religious education.* Birmingham, AL: Religious Education Press.

Okun, B. (1984). *Working with adults: Individual, family, and career development.* Monterey, CA: Brooks/Cole.

VOLUNTEER ISSUES AND TRENDS SURVEY IN THE 1990'S: PRIORITIES FOR THE PRACTICE OF VOLUNTEER ADMINISTRATION

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ABSTRACT. Identifies current and future issues and trends affecting volunteerism. Using the Delphi technique, a national sample of experts in volunteerism and a comparative sample of Minnesota practitioners identified and rated issues and trends identified as most important to the field of volunteerism in the coming decade. The findings suggest a role and focus for adult educators for the development of continuing educations programs.

INTRODUCTION

Throughout American history, volunteerism has helped to shape our nation (Ellis & Noyes, 1990). Now, as we approach a new century, the needs of our society are changing - and so are the needs, roles, responsibilities, and identity of the volunteer community.

The purpose of this research was to identify issues and trends affecting the field of volunteerism in the coming decade; and to assess the extent to which the experts and practitioners views are congruent. Congruence, or lack of congruence is important because professions, like organizations benefit by its members pursuing a common vision. This "common language" or "a way to proceed" will affect a profession's strategic direction - the services it offers and the markets and customers it serves (Tregoe, 1990). Adult education can facilitate the bringing together of different interpretations of the future, some conflicting, and making them visible through programs of continuing professional education.

METHODS & PROCEDURES

This study was conducted during April, 1990 and May, 1991. The study employed a research method known as the Delphi technique. Delphi is a method of eliciting expert opinion through the use of successive questionnaires administered to individual panelists who are selected on the basis of their perceived expert knowledge or opinion (Lauffer, 1982; Weaver, 1971).

This study organized expert opinion in a three round process. The research method consists of three rounds of communication with a jury or panel. The first round was used to generate reaction in rounds two and three.

In preparation for the first round, a small group of prominent national leaders and educators in the field of volunteerism were contacted, and asked to provide the names of ten people they perceived as knowledgeable about volunteerism. This nomination process identified a panel of 33 national leaders and experts.

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The first round of communication was a request to identify 5 - 10 issues or trends affecting volunteerism that they believed needed to be resolved in the future. Panel members were also asked to supply a sentence or two of explanation for each of the issues/trends they identified.

These statements were compiled into a questionnaire for the second round. The questionnaire was sent to the same panel, asking them to judge the degree of future importance of each statement to the volunteer community on a scale of 1 - 6, with 1 being "critically important" and, 6 being "trivial." Respondents were also asked to reword or add statements as they thought necessary.

The third round consisted of a final, revised questionnaire of 30 issues/trends that incorporated the suggestions from round two. These statements were mailed to the panel asking them, to again, judge the degree of importance, on a scale of 1 to 6, of each of the statements to the volunteer community in the coming decade. Seventy six percent (N=25) of the national panel responded to the final questionnaire.

A parallel study of Minnesota practitioners was conducted using the third round and final questionnaire of 30 issues/trends statements. The membership of the Minnesota Association of Volunteer Directors was mailed a questionnaire and asked to judge the degree of importance, on a scale of 1 to 6, of each of the statements previously judged by the panel of experts. Forty-four percent (N=145) of the Minnesota practitioners responded to the final questionnaire.

The results from the practitioner sample are compared to the findings from the national panel of experts. Preliminary data are presented in this report.

PARTICIPANTS

The national panel of experts in the field of volunteerism represented a broad and diverse group of opinions. Criteria used to select the panelists from initial recommendations included: multiple recommendations; broad range of program areas; diverse geographical representation (i.e., east coast, west coast, northern, southern, southwestern, and western); rural and urban; and, cross cultural representation (i.e., gender and race).

Panelists included members of national non-profit organizations, professional associations, public agencies, trainers/educators, and individual volunteers serving on boards of directors/national advisory committees. The panel of experts included, among others, members of the Association of Volunteer Administration, VOLUNTEER: The National Center, National 4-H Extension Service, International Association on Justice Volunteerism, Independent Sector, American Red Cross, United Way of America, the Alton Wilkes Society, state Departments of Volunteerism, state Departments of Corrections/Human Services, Virginia Tech University - Center for Volunteer Development, Oklahoma State University-Department of Home Economics, and Simmons College-Alumnae Affairs Office, Energize Associates, MacDuff-Bunt Associates, VM Systems, and Volunteer Management Associates.

The sample of Minnesota practitioners were current members of the Minnesota Association of Volunteer Directors (MAVD). Practitioners represented in the study included, among others: representatives of public and private social services agencies, family services, community action centers, volunteer service bureaus/voluntary action centers, university Extension, private colleges, universities, historical society, public schools, medical/health care services, recreation, and corrections, including domestic and family violence programs.

RESULTS

A mean score of 2.0 was determined to be the minimum requirement for an issues/trends statement to be considered "very important" to the field of volunteerism in the coming decade. Issues/trends statements with a mean score greater than 2.0, but less than 3.0, were considered "important" to the field; and, mean scores greater than 3.0 were considered "somewhat" or the "least important". Overall, the experts and practitioners agreed on the relative importance of 20 out of 30 issues/trends statements. (See Table 1).

Results of the panel of experts and the Minnesota sample of practitioners were compared. Of the 30 issues/trends statements listed, the experts and practitioners agreed that four issues/trends were "very" to "critically" important to the volunteer community in the coming decade. (See Table 2).

The panel of experts and the sample of Minnesota sample of practitioners also agreed that 14 of the issues/trends statements were "important" to the field of volunteerism in the next ten years (See Table 3).

Data analysis found that the panel of experts and the sample of Minnesota practitioners agreed on two issues/trends statements as being "somewhat" or the least important to the field of volunteerism in the coming decade. (See Table 4).

CONCLUSIONS AND IMPLICATIONS

The panel of experts and sample of Minnesota practitioners agree on the majority (66%) of issues/trends statements in their future importance to the field of volunteerism. Both groups agreed on the critical importance of marketing and communicating the value of volunteer services to their target markets. Experts and practitioners also agreed that removing barriers to volunteering, and enhancing the volunteer ethic of American youth were very important to the future of the volunteer community. Both, experts and practitioners, rated the majority of their responses to issues/trends statements as "important" to the volunteer community in the coming decade.

Areas of disagreement appear to be the result of experts holding stronger opinions on a number of issues. They held stronger opinions about the importance to the field of twice as many issues/trends than did the practitioners.

Major differences in the "very" important category between the experts and practitioners opinions were found in two areas. Experts (X=1.48) indicated that the issue of increased minority involvement in volunteer activities as more critically important to the future of volunteerism than did the practitioners (X=2.12). Conversely, practitioners (X=1.84) rated the issue of volunteer screening of greater importance than did the panel of experts (X=2.32).

In the category of "somewhat" important, experts and practitioners were in agreement on two out of the three issues/trends statements rated higher than 3.0. Both samples indicated that treating volunteers differently based on their recruitment sources or motivations was of little importance to the future of volunteerism. Likewise, both groups agreed that defining who was a volunteer and who was not a volunteer was not an issue.

This study suggests that experts and practitioners in the field of volunteerism agreed on the importance of a majority of the issues/trends identified to the future of profession. There were some differences in opinion which must be addressed to enable the profession to move forward in the coming decade.

Societal events and trends necessarily affect the practice of volunteer program administration. If managers of volunteer programs are not current on issues and trends in the field, they may find themselves struggling to meet the needs of their clients (Seita, 1990). Similarly, it is important for leaders and practitioners to share a common vision if the volunteer community is to continue to play an important role in American life. This strongly argues for the active participation of the adult education community in providing continuing professional education that focusses on developing a shared vision of the future directions of the volunteer community.

LITERATURE CITED

Ellis, S. J., & K. H. Noyes. 1990. By the people - a history of Americans as volunteers (Revised Edition). San Francisco, CA: Jossey Bass Publishers.

Lauffer, A. 1982. Assessment tools for practitioners, managers, and trainers. Beverly Hills, CA: Sage Publications.

Seita, T. 1990. Leadership Skills for the New Age of Nonprofits. Downers Grove, IL: Heritage Arts Publishing.

Tregoe, B.B., et. al. 1990. Vision in action: Putting a winning strategy to work. New York: Simon & Schuster, Inc.

Weaver, T.W. 1971. The delphi forecasting method. Phi Delta Kappan, 52 (5):267-271.

TABLE 1

Mean scores on issues/trends for Experts and Practitioners

Issues/trends statements	$\bar{X}_E$	$\bar{X}_P$
Treat volunteerism as a form of philanthropy	3.25	2.77
Communicate the value of volunteer services	1.88	1.63
Integrate volunteer services into larger agency structures	2.68	2.48
Remove barriers to volunteering	1.24	1.92
Address competition among agencies	2.96	3.20
Effect strong, supportive legislation for volunteer services	2.08	2.04
View volunteerism as an international movement of power and influence	2.52	2.72
Improve relationship between agency related and non-agency volunteer worlds	2.40	2.90
Develop responsive leaders of volunteers	1.72	2.13
Clarify volunteer-paid staff relationships	1.88	2.38
Develop more professional training for volunteers	2.32	2.39
Make volunteerism relevant to social issues	2.20	2.25
Increase number of effective voluntary action centers/bureaus	2.08	2.73
Enhance responsiveness of large volunteer organizations to local volunteer needs	2.12	2.74
Market volunteerism	1.96	1.94
Develop strategies to protect volunteers	1.80	2.04
Enhance the philanthropic/volunteer ethic of American youth	1.96	1.97
Identify extent & type of volunteerism done by different groups of volunteers	2.88	2.80
Utilize human & material resources more effectively & humanely	2.20	2.24
Enhance collaboration between and among all non-profit "helping" systems	1.84	2.15
Screening of volunteers	2.32	1.84
Deal with unrealistic expectations of the voluntary sector	2.36	2.19
Enhance professionalism of volunteer program administrators	2.08	2.04
Increase minority involvement in volunteer activities	1.48	2.12
Differentiate approaches to volunteer development between traditional and non- traditional volunteer	3.16	3.06
Define who is a "volunteer" & who is not	3.60	3.44
Mobilize adequate financial resources to support volunteer efforts	1.88	2.13
Recognize the "value added" aspects of volunteerism	2.72	2.18
Recognize economic value of volunteer services	2.12	2.12
Create equitable & meaningful work for volunteers	1.80	2.09

TABLE 2

Issues/trends identified as "Very" to "Critically Important" by, both, experts and practitioners

Issues/trends statements	$\bar{X}_E$	$\bar{X}_P$
Remove barriers to volunteering	1.24	1.92
Communicate value of volunteer services	1.88	1.63
Market volunteerism	1.96	1.94
Enhance philanthropic & volunteer ethic of American youth	1.96	1.97

TABLE 3

Issues/trends statements identified as "important" by, both, experts and practitioners

Issues/trends statements	$\bar{X}_E$	$\bar{X}_P$
Integrate volunteer services into larger agency structures	2.68	2.48
Effect strong, supportive legislation for volunteer services	2.08	2.04
View volunteerism as an international movement of power and influence	2.52	2.72
Improve relationship between agency related and non-agency related worlds	2.40	2.90
Develop more professional training for volunteers	2.32	2.39
Make volunteerism relevant to social issues	2.20	2.25
Increase the number of "effective" volunteer service/voluntary action centers	2.08	2.73
Enhance responsiveness of large volunteer organizations to local volunteer needs	2.12	2.74
Identify extent & type of volunteerism done by different groups of volunteers	2.88	2.80
Utilize human & material resources more effectively and humanely	2.20	2.24
Deal with unrealistic expectations of the voluntary sector	2.36	2.19
Enhance professionalism of volunteer program administrators	2.08	2.04
Recognize the "value added" aspect of volunteerism	2.72	2.18
Recognize the economic value of volunteer services	2.12	2.12

TABLE 4

Issues/trends identified as "somewhat" or the least important by experts and practitioners

Issues/trends statements	$\bar{X}_E$	$\bar{X}_P$
Differentiate approaches to volunteer development between traditional and non-traditional volunteers	3.16	3.06
Define who is a "volunteer" and who is not	3.60	3.44

EXTENSION EDUCATION: IMPACTING PUBLIC POLICY

Gregory K. Hutchins[1]

ABSTRACT. As the cooperative extension system shifts its focus to "issue-based programs," it becomes increasingly involved with public problems, as opposed to individual needs. Traditional extension education strategies, which so often are intended to transfer technology or enhance personal development, are generally not sufficient to produce the kind of change in social conditions that would sufficiently impact these issues. Many of these issues or problems must be addressed at a public or collective level, in the form of policy, regulation, or law. A new model of extension program development has been proposed which calls for that kind of focus. From a practical perspective, some extension educators are currently working to influence the development of such public policies as a part of their educational role. They are attempting to alter social conditions through educating public decision-makers. This paper documents some of those examples and calls for extension educators to be even more deliberate about providing education and informed perspective at the point of public decision-making.

INTRODUCTION

Today's extension educators face complex programming questions as they attempt to address such topical issues as "youth at risk" or "community revitalization," which are currently in vogue within the cooperative extension system. Standard extension education practices are sometimes insufficient for producing the broad societal impacts that extension services are now attempting to achieve in these areas. Neither the technology transfer model, nor the human development model of promoting individual growth are adequate. Instead there is a need for extension to adopt a "public policy" model, taking a more active approach in helping to shape public policies and systems through education of public decision-makers. Extension educators in Minnesota are doing that, and in the process are helping to define a new model of extension practice.

CURRENT PRACTICE

The Cooperative Extension Service defines itself as a nonformal educational outreach of the land-grant university. Its educational enterprises typically serve one or more of the following four themes as described by Patton (1988): (a) Technology transfer - the adoption of a specific practice, (b) problem solving - the application of knowledge to a specific and immediate problem, (c) education - helping clients understand how to make informed decisions and compare practices over time, and (d) development - contributing to long-term growth of individuals and/or communities. The dominant models of practice tend to be either "expert" or "human development," both of which usually focus upon individuals. The "expert" approach involves the extension staff member providing information to a client, typically for the client's individual use. In the "human development" approach, the extension staff are designing programs and activities to promote the self-development of individual learners.

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Underlying these approaches is the notion of neutrality. Extension dogma contends that its information is objective and unbiased. This is premised upon the supposed objectivity of the scientific "research-base" which extension proudly says is the source of its program knowledge (Meyers & Pigg, 1990).

NEW MODELS

A new focus on the public arena is now dawning. Calls are being made for extension educators to become more involved in the practice of education for social action (Meyers & Pigg, 1990; Sauer, 1990). There is an emerging recognition among some extension workers that to effectively address the contemporary issues with which extension is now engaged, public systems and public policies must be dealt with. Offering educational programs to children who are "at risk," for example, may not be as beneficial to those children as working towards changing the social systems that are placing them at risk. Some issues require collective change, produced through actions at a policy level.

Meyers and Pigg (1990) suggest the following model for extension education, which involves action on three levels: (a) Transferring information and skills; (b) enabling learners to organize and act on their own behalf, and acting with them to solve problems and apply their learning; and (c) taking part in action to influence and employ law, regulation, and policy to meet priority human needs. This comprehensive approach is intended to produce changes in individuals, communities, and policies, laws, and regulations. This model requires extension to move away from its traditional position of neutrality with respect to policy positions. Meyers and Pig argue that for extension to be effective and relevant, it must be willing to stand and act on the side of an issue with involved constituents, and not to simply offer "unbiased" information to those who might be interested.

CASE EXAMPLES

While some would argue that this particular emphasis on policy is inappropriate and dangerous for extension to embrace, there are examples of successful extension efforts designed to influence the development of laws and policies. These program efforts help to support the Meyers and Pigg model, and perhaps lead the way for a new era of relevancy for the extension system.

YOUTH AND FAMILIES AT RISK

Today there is much attention being given to the difficulties faced by many youth and families in American society. A host of child and family advocacy groups are striving to improve the conditions for "at-risk" people by attempting to influence public policies. Family life professionals are being urged to take a greater role in advocacy and policy work (Mancini & Orthner, 1988). Extension staff in Minnesota have responded at both the state and local level with educational efforts that have produced policy changes.

Learning Readiness

In 1991, the Minnesota State Legislature created a new learning readiness program for needy pre-schoolers, and funded it with $8 million for its first year. It is an attempt to give special help to 4-year olds who are developmentally disadvantaged or experiencing risk factors that could impede their learning readiness. A state extension youth faculty member played a key role in the formation of this legislation. The extension faculty member had initiated a pilot program in a Native American community in Minneapolis with financial support from several foundations. He involved a state senator in the project

and the senator became convinced of the value of the effort. The senator proceeded to bring the concept to the attention of legislative leaders who subsequently supported the measure and brought it through the legislative process. The extension faculty person was involved in consulting with the legislative leadership team on the concept and on the actual language in the bill.

In-School Day Care for Teen Parents

In west central Minnesota, a county extension agent was invited by the local school board to serve on a committee that was to consider the feasibility of establishing in-school child care for use by teen mothers in the district. The agent had been doing educational programs for teen mothers and thus was viewed as a local resource in this area. The extension agent worked with the committee in assessing community opinion, gathering research, and reviewing literature on the topic. She participated in the committee debate regarding their recommendations to the board and joined with the committee in taking a position in support of the child care center. The school board acted upon the committee advice and has created such a facility. They have also asked the extension agent to provide some of the education that will be offered to the parent-users of the center.

Sexuality Education for Eighth Graders

In east central Minnesota, a county extension 4-H agent was attempting to implement a sexuality education program in the schools. The program would involve teenagers as teachers, working with eighth grade students on questions of sexuality. In one school there had been no education in this area and the school's principal was very hesitant about having such a program. The agent organized a coalition of students and adults and guided the group in designing a strategy for gaining community and school support for this effort. The agent helped a group of students understand the value of such a program, and then assisted them in becoming spokespersons for the program. The agent also met with various community organizations and individuals to solicit support. The school's principal was influenced by the campaign and instituted a policy that now requires all eighth grade students in that school to participate in sexuality education sessions three times a year.

Youth Service

The idea of giving high school students credit towards graduation for their contributions outside the school building is foreign to many educators. Recently however, youth service has received much attention in Minnesota as a learning activity deserving of a legitimate place in the school. In several districts around the state, county extension agents have advocated with school boards on behalf of this particular piece of school reform. They have typically been a part of a community youth council that sees the value in this alternative and have worked with community groups and school officials to establish the youth service concept as a regular part of the school curriculum with full credit for participation.

WATER QUALITY

Water quality is currently one of Minnesota Extension's state-wide initiatives. While much of the programming has focused upon consumers, farmers, and individual well owners, there has also been some policy work by extension staff.

Comprehensive Water Management Plans

In northeast Minnesota, a county extension agent is coordinating the work of a task force that is developing a comprehensive water management plan for the county. The task force has collected and analyzed data, prioritized problem areas, set goals, and developed an implementation plan. The plan will be submitted to the County Board of Commissioners for their approval and adoption. Included in the plan will be recommendations for continued research, education, and for the establishment of specific county ordinances. Throughout the plan's development, the extension agent has played a key role in providing information and perspective and in directly influencing the work of the group.

Land Use Regulation

The actual interpretation and implementation of many state laws and regulations frequently occurs through the work of various government agencies. Thus public policy can also be influenced at this stage of administrative interpretation. One state extension economist in Minnesota has been very active at this point of influence in the water quality and land use areas. By focusing upon selected agencies and gaining appointment to various agency committees, he has been a part of groups that advise the decision-makers. Thus his informed perspective helps to shape the actual interpretation of the policy.

Feedlot Issues

Judicial decisions also form public policy. As a result of a legal dispute involving a feedlot in southeast Minnesota, a judge created a feedlot committee to draft ordinances for the county that would address specific questions. A county extension agent was appointed by the judge to serve on this committee. Thus the agent is being asked by the court to participate in the development of these proposed local policies regarding land use.

CONCLUSIONS

These examples illustrate the active role that some extension staff are playing in the creation of public policy. Each of these efforts will result in changes in systems. They are contributions to the larger collective society, not just to individuals. These efforts also show how extension staff are successfully taking positions on certain issues. They have not been neutral. Some extension staff are seeking or accepting opportunities to move the social change agenda forward. Their knowledge and their access to knowledge at the land-grant university make them valuable participants in the development of public policies at both the state and local levels.

There are at least three different approaches described in the above case examples: (a) Involving decision-makers in model programs that demonstrate the potential of a possible new policy; (b) joining together with others to develop a perspective on an issue and recommendations for policy change; and (c) gaining appointments to key committees that advise decision-makers. If the extension educator is viewed as a credible source of informed perspective, and if he/she is in a position to advise, either directly or via committee, the public decision-makers, then these targeted educational interventions can potentially have a dramatic impact on social systems. By providing informed perspective to the public decision-making process, extension can make a substantial contribution to social change.

Extension needs to do more work in public policy. While partisan political activity or the pursuit of a personal political agenda is not appropriate for extension staff, the organization cannot ignore the

importance of policy development as a way to alter the conditions that are contributing to the public's problems or issues. If the extension service is serious about solving public issues, then it should target the policy level for educational action right from the initial design of the program. This means being strategic about coalition building and developing access to decision-makers. It also means being deliberate and intentional about addressing public policies as they relate to the public issues that extension is attempting to affect.

LITERATURE CITED

Mancini, Jay, & Orthner, Dennis. (1988, October). The context and consequences of family change. Family Relations, 37. 363-366.

Meyers, James, & Pigg, Kenneth. (1990, Summer). Redefining education for action: Issues programming in extension. The Rural Sociologist, 42-45.

Patton, Michael Q. (1988). Extension's future. Beyond technology transfer. Knowledge: Creation, Diffusion, Utilization, IX (4). 476-90.

Sauer, Richard. (1990). Meeting the challenges to agricultural research and extension. American Journal of Alternative Agriculture, 5. 184-187.

BARRIERS TO EDUCATION AS PERCEIVED BY ADULT STUDENTS AND ADMINISTRATORS IN MINNESOTA COMMUNITY COLLEGES AND TECHNICAL COLLEGES

Mark L. Larson[1]

ABSTRACT. Findings of a study of barriers to education as perceived by adult students in two-year postsecondary institutions in a midwestern state indicate that barriers relating to students' individual situations had the greatest impact on their return to education. Community college students found the barriers to be more significant than did their technical college counterparts, but age of student did not figure significantly in adult students' perceptions of barriers. Administrators perceived the influence of the barriers to be more significant to students than did students themselves.

INTRODUCTION

Changes in social and economic trends in the United States have resulted in the need for additional retraining for adults. Many factors have contributed to this need: corporate restructuring, the shift of manufacturing to Asia, Mexico and other parts of the globe, and the emergence of new family structures.

Faced with these factors, many adults have found that they need new skills and are swelling the enrollment in two-year postsecondary institutions. In Minnesota's technical college system, the percentage of fulltime students age 26 and older enrolled has grown from 11.4 in 1975 to 34.1 in 1987 (Minnesota Student Information System, 1987). In the Minnesota community college system, fulltime enrollment has also increased for students age 25 and older. In 1983, the percentage was 15.8; in 1987, it increased to 22.3 (Minnesota Higher Education Coordinating Board, 1989).

Returning to school can be a formidable problem for older students. The challenge of balancing school, work and family obligations may be enough to keep some adults from considering a return to education. Costs, scheduling problems, and lack of childcare and transportation may also be discouraging factors. The level of self-confidence and previous educational experiences may also contribute to the adult student's attitudes towards continuing his or her education.

Administrators attempting to meet the needs of this growing population are faced with new demands as well.

PURPOSE

The purpose of this study was 1) to identify reasons adults age 25 and older enroll in community and technical colleges for further education, 2) to identify barriers to education as perceived by these adults, 3) to determine if there is a relationship between reasons adults enroll in two-year institutions and their perception of the barriers they may face, 4) to compare adult students' perceptions of the severity of the barriers, 5) to examine adult students' responses in terms of their age and institution type, 6) to determine

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the extent to which postsecondary institution administrators feel that barriers exist, and, 7) to compare administrators' and adult students' points of view regarding their institution's response to the barriers.

CONCEPTUAL BASIS FOR THE STUDY

The framework of this study is derived from the work of Carp, Peterson, and Roelfs (1974) in which they identified twenty-four perceived barriers to learning, and Cross (1981), who grouped these barriers into three categories: situational, institutional, and dispositional. Situational barriers are those that are the results of an individual's situation or circumstances in life at a particular time. Situational barriers might include the cost of education, lack of time to attend classes and to study, and home and job responsibilities which may preclude attendance. They also may include the lack of child care and transportation. Lack of place to study and lack of support from family and friends round out the list of situational barriers. Institutional barriers are the rules, regulations, procedures and practices of an institution which hinder adults in their pursuit of further education. Problems with coordinating schedules, lack of information about programs, procedural problems, time requirements, and entrance requirements may all be institutional barriers. Dispositional barriers result from the attitudes or disposition of the student or prospective student. Level of self-esteem, past educational performance, uncertainty about future needs, concern about age and attitude, and energy level may all be grouped into this heading.

SUBJECTS

Three hundred fifty-six full-time adult students over age 25 and 70 administrators were surveyed at eight two-year postsecondary institutions: four community colleges and four technical colleges from urban and rural settings.

METHODOLOGY

Two questionnaires--one for adult students and one for administrators--were developed. The student questionnaire asked adult students to rate the importance of reasons why adult students choose to enroll in postsecondary education and the extent to which each of 24 barriers influenced their (and other adult students') enrollment. They were also asked the extent to which their school was responding to each barrier.

The administrator questionnaire asked administrators to rate the importance of reasons why adult students enroll in postsecondary education. The questionnaire also asked administrators to rate the extent to which they perceived that barriers influenced adult students' enrollment in postsecondary education, and the extent to which their school was responding to the barriers.

DATA ANALYSIS

Regression analysis was used to determine if there was a statistical relationship between the reasons adults listed for enrolling in postsecondary education and barriers they perceived in enrolling. Multivariate analysis of variance was used to test for significant differences in adults' perception of the barriers by institution and age. Student versus administrator views of the severity of the barriers and the extent to which their institutions were responding were also analyzed.

RESULTS

Using a factor analysis, three groups of reasons for enrolling in postsecondary education were identified--move on, move up, and personal reasons. The amount of influence of barriers to education could not be predicted from these reasons study participants gave for enrolling in education or from demographic characteristics about them.

All of the correlations were below .27; however, a set of five variables was found that consistently had non-zero correlations across the 24 barrier variables. A separate multiple regression using a stepwise procedure was run for each barrier variable using the five variables having non-zero correlations as independent or predictor variables. This further analysis revealed that the correlations accounted for very little variance in each variable and, thus, adult students' perceptions of the influence of barriers to further education could not be predicted from the reasons they return to school or on the basis of the type of school they attend, their sex, or their age.

Study participants, both community college and technical college students, found situational barriers to have the greatest influence on their enrollment in postsecondary education, with dispositional barriers ranking next greatest. Institutional barriers ranked last.

The situational barriers "school costs too much" and "not enough time for studying" received the highest mean ratings, 2.98 and 2.76 respectively on a five-point rating scale. (On the questionnaire, adult students were asked to rate their perceptions of the barriers on a scale from 1 to 5, with a score of 1 denoting that the barrier was not significant, 3 denoting that the barrier was somewhat significant and 5 denoting that the barrier was very significant.)

The results of this study parallel to some extent the findings of several studies cited in the literature. Johnstone and Rivera (1965), Carp, Peterson, Roelfs (1974), Smydra and Kochenour (1979), found cost and time, identified as situational barriers, to be the factors most often cited as impeding an adult's attempts to seek further education.

Community college students rated the three types of barriers as being significantly greater than did technical colleges students. Further individual analysis of each of the 24 barriers revealed that community college students viewed 19 of the 24 as greater. Cost was given the highest mean rating of the 24 barriers by all students in the study and adult students at community colleges rated it 3.2 (a somewhat significant barrier) on the five-point rating scale. Ratings of the other barriers were lower.

Age of adult student did not figure significantly in his or her perception of the influence of barriers. Three age groups--25-35, 36-45, and 46 and up--were defined and no difference in perception of the barriers was found among the groups.

Adult students' and administrators' responses to the barriers were compared and the results revealed that administrators viewed the barriers as a greater deterrent to adult students' enrollment in postsecondary education than the students themselves did.

DISCUSSION

While individual adult students' ratings of the barriers ranged from 1 to 5, the mean scores suggest that students as a group do not perceive the barriers to be very significant in their influence on adult students' return to school.

Since a number of institutions have been paying close attention to the needs of adult students, many of the issues which may at one time have been barriers, may now be less important to adult students as a group.

In their written comments on their questionnaires, many students stated that their institution was making strides in the area of adult student support. Since several of the institutions in the study have begun programs and expanded services to aid adult students--i.e., child care centers, non-traditional support groups, evening and weekend classes, evening and weekend support, and administrative services--student perceptions of institutional response is not surprising.

Community college students' perceptions of the severity of the barriers could be influenced by the length of their program of study. Technical college courses range from 9 to 24 months in length. For community college students, however, the prospect of looking ahead to additional years of schooling in order to complete a baccalaureate degree may have have a greater impact on their views of the barriers.

While tuition costs between the two types of schools are now comparable on a per-quarter basis, the overall cost of a community college education when viewed as the first two years of work towards a baccalaureate degree may influence community college students' perception of cost as barrier.

Adult students' views about the curricula in their respective schools may also have influenced their perceptions of the barriers. Technical college students may be less intimidated by their course of study with its practical orientation than community college students embarking on a more theoretical education.

Responses of the three age groups may have been balanced by factors unique to each group, or the barriers may not be as age-specific as believed. While it was thought that younger students would have more confidence in their ability to succeed in school, more energy, and would be less intimidated by the rules and regulations of the academic system, these characteristics are not unique to them and do not appear to depend on age group.

Administrators may be aware of the changing demographics and have been under considerable pressure to develop programs and processes to ease the barriers faced by adults. Their daily contact with large numbers of adult students experiencing problems rather than with those who are successful and need no help may influence their perceptions of the severity of barriers.

Administrators themselves also may have been influenced by the fact that they were in school at a time when little attention was paid to the needs of adult students.

Individually, administrators may feel that their institution could be doing more to aid the students.

CONCLUSIONS

Because attention has been focused on adult students in recent years, institutions appear to be responding to the barriers facing adult students. The results of this study suggest that this is occurring. Certainly, institutions have had to broaden their appeal to adult students because of the shrinking pool of younger ones.

Even though this study suggests that adult students at Minnesota's two-year institutions as a group view the influence of barriers to education as less severe than this researcher and administrators at the institutions studied originally thought, it is still important that monitoring of student needs be done on a continuing basis.

LITERATURE CITED

Carp, A., Peterson, R., and Roelfs, P. (1974). Adult learning interests and experiences. In K. P. Cross and John R. Valley (Eds.) Planning non-traditional programs. (pp. 11-52) San Francisco, CA: Jossey-Bass Publishers.

Cross, K.P. (1984). Adults as learners. San Francisco, CA: Jossey-Bass Publishers.

Johnstone, J. W. C. & Rivera, R. J. (1965). Volunteers for learning. Chicago: Alden Publishing Company.

Minnesota Higher Education Coordinating Board. (1989). Undergraduate Enrollment by Age Fall 1983 through Fall 1987. St. Paul, MN: Minnesota Higher Education Coordinating Board.

Minnesota Student Information System. (1987). New Enrollees: Age of New Enrollees. St. Paul, MN: State Board of Vocational Technical Education.

Smydra, M. & Kochenour, E. (1979). A summary of adult students at Jefferson Community College. Eric Document Reproduction Service No. ED 165 818.

LEARNING STRATEGIES CONCERNS AMONG ABE PRACTITIONERS

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ABSTRACT. Building on the Learning and Study Strategies Inventory of Claire Weinstein and associates, this study develops a framework consisting of ten categories for understanding and diagnosing learning strategy malfunctions among low-literate adults. The categories are Anxiety, Attitude, Concentration, Information processing, Motivation, Scheduling, Selecting the main idea, Self-testing, Study aids, and Test strategies. The study also presents three approaches to improving students' learning strategy skills - direct, embedded, and immersion - and discusses advantages and disadvantages of each.

INTRODUCTION

Learning strategies are conscious thoughts, behaviors, or activities initiated by a learner to facilitate the processing of information so that knowledge integration, retrieval, and usage are enhanced. For individual students, these thoughts and behaviors constitute an organized array of options from which choices of appropriate learning strategies are made in response to particular learning needs and occasions.

This paper will consider two major aspects of practitioner concern about learning strategies: diagnosis and remediation. The first section describes a framework which aids in the understanding and diagnosis of learning strategies. This framework provides the ABE practitioner with a conceptual tool by which to identify precisely the sources of a learning strategy malfunction. The second section leads the practitioner to consider approaches to improving students' learning strategies and to assess the advantages and disadvantages of each.

FRAMEWORK FOR IDENTIFYING LEARNING STRATEGIES PROBLEMS

Although much learning strategy theory has evolved from research with elementary and secondary education students, Claire Weinstein and colleagues (1988) developed the Learning and Study Strategies Inventory (LASSI) for college students. Research for the LASSI began as individual items were gathered from existing learning strategy inventories. After the elimination of inappropriate and duplicate items and after testing the instrument, the number of items was reduced from 645 to 90 and arranged in ten categories.

Building on the Weinstein framework and its ten categories, the authors of this paper have described each category in such a way that it is appropriate to basic education students. Each of the categories with its description follows:

Anxiety: A student is uncertain about the various roles, relationships, materials, and other components which comprise the learning environment. As the result, the learning experience is clouded by the student's fear of failure and association of this learning experience with previous negative learning

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experiences. Anxiety may be reflected by uncertainty, uneasiness, discouragement, and lack of confidence; it may be heightened when the student links performance in the learning environment with life experiences, as in a case when the GED is required for employment. A teacher may observe that an anxious student is tense or preoccupied during class, is unwilling to practice new skills or behaviors, and is unable to improve learning performance by increasing the amount of time studying.

Attitude: Attitude characterizes a student's posture or interest in a learning experience which may predispose the student to respond favorably or unfavorably. A student's interest may be enhanced when the student sees clearly the relevance of the learning experience to the student's personal and career goals, when the learning activities are enjoyable, and when successful completion of the learning experience is important to the student. A teacher may observe that a student with an attitude negatively disposed toward learning may have poor attendance habits, may be disinterested in participating in learning activities, and may be unwilling to provide the effort necessary to succeed in the learning experience.

Concentration: A student's ability to focus on the skills and content to be learned, to respond to particular instructional media in use, and to ignore thoughts and concerns which compete with the instructional process for attention may be described as concentration. Good concentration strategies are in use when a student discriminates among competing stimuli, maintains a focus on class activities, and is able to complete independent learning activities, such as homework, without distraction. Poor concentration is evidenced by daydreaming, looking around aimlessly or responding to distractions, or by a student's inability to remember, discuss, or use the content of recent readings, discussions, or lectures.

Information Processing: A student is able to interpret, compare, and apply information and skills learned. The student can discuss the meaning of content using his/her own words, can connect written communication with spoken communication, and can connect information being learned with prior experience. Good information processing strategies are reflected when a student is able to assimilate, recall, and use the content of learning experiences in conversation and in other life experiences and can contrast new information with information previously used.

Motivation: A highly motivated student accepts and demonstrates responsibility for learning. As the result, such a student is eager to participate in the learning process, combining enthusiasm with diligence, and has positive expectations for the outcomes of the learning process. Students with high levels of motivation are faithful in completing their assignments in a timely and careful fashion and are eager to try new ways of learning. Students who accept full responsibility for their conduct and performance and who are willing to sacrifice other interests in order to secure education are highly motivated.

Scheduling: Scheduling refers to a student's use and control of time and particularly his/her and ability to integrate learning experiences into a range of other activities. Students for whom scheduling is problematic find it difficult to allocate time to study, live at the mercy of the various demands placed upon them, and are frequently disorganized as the result. Students who have regular study times, successfully complete assignments on time, attend class faithfully have mastered the strategy of scheduling.

Selecting the Main Idea: A student who successfully selects the main idea is able to discriminate between important and unimportant information and can relate other information to the main idea. Students who use learning strategies to select the main idea in lectures, readings, and discussions successfully are able to identify main points and key ideas and to present a rationale for their selection. Students who have ineffective learning strategies for selecting the main idea are unable to distinguish between important and unimportant information.

Self-Testing: A student who successfully uses a self-testing strategy periodically performs self-checks on his/her own initiative to ensure comprehension and regularly develops self-testing questions for study and practice. Such a student also prepares for class by reviewing class notes as well as study aids in the text. Students with effective self-testing learning strategies review the main points from earlier lessons, from underlines, and from textbook summaries and reflect on their content; they also ask questions about material which they do not understand.

Study-Aids: Using study aids which are made available through class activities and instructional materials; paying special attention to advance organizers, bold face type, underlines, illustrations, summaries, etc.; working practice exercises and sample problems; using diagrams, charts, drawings, and outlines are all indications that a student uses good strategies to assist in studying, assimilation, and remembering material. Students with successful strategies will also develop their own study aids and use them in classroom learning situations and will be able to discriminate among study aids which are the most useful in settings which require comprehension, application, remembering, or other levels of learning.

Test Strategies: Students with effective test-taking skills are able to combine their skills in selecting main ideas, summarizing and synthesizing content, and expressing that material clearly. They use different study techniques depending on the type of questions to be asked on the text. As the result, students develop confidence in their test-taking ability and are able to take tests with a minimum of anxiety.

Teachers are constantly observing effective and ineffective learning strategies in process. These descriptions provide teachers of adult basic education students with a framework for examining the situations which they experience on a daily basis. This framework also assists teachers of low literate adults to analyze their experience with students' learning strategies and begin to understand it in ways which aid in their use of it.

INTEGRATING LEARNING STRATEGIES INTO BASIC SKILLS

The above framework may appear to be an unusual approach since adult literacy programs are strongly oriented toward the achievement of ends (Conti, 1985), e.g., completion of the GED or the development of basic skills. However, for those practitioners interested in increasing the capacities of adult literacy students to learn how to learn, the literature suggests that there are three approaches through which adult literacy practitioners can integrate learning strategies into the basic skills curriculum.

DIRECT TEACHING OF LEARNING STRATEGIES

The direct teaching of learning strategies relies on an independent program of studies which treats the mastery of learning strategies as separate from the acquisition of subject matter content of academic programs (Weinstein, 1988). The central argument for the direct teaching approach originated from research and practice in the success of study skills programs in elementary, secondary, higher education, and military training. In these programs students are exposed to learning- and study-skills via an "add-on" curriculum before or after an existing program of studies, or via a "parallel" curriculum that accompanies an existing program of studies.

The focus of learning and study skills programs is the development of learning strategies skills that are thought to be common to the success of students in the academic program. To be successful this approach requires a valid and reliable method (i.e., an assessment instrument) for diagnosing the specific areas in

which students may be particularly weak. This information is used to facilitate the selection of individual topics to be emphasized for that individual.

Advocates of this approach argue that these skills are best taught separately from subject-matter content. Although content may be included as part of the program, its mastery is clearly incidental to the main goal of improving students' abilities to acquire, process, retain, and communicate the most relevant information in an academic program. Evaluation studies of learning strategies programs which included control groups have shown them to be successful in several respects. For example, McCombs (1988) found that a motivational program conducted with Air Force trainees prior to their enrollment in a Precision Measuring Equipment course found that they liked the program and found it helpful in their course work and personal lives, and had significantly higher test scores and lower test failure rates than control trainees.

INDIRECT TEACHING OF LEARNING STRATEGIES

A second approach to teaching learning strategies is indirectly "embedding" this knowledge into the content of the academic curriculum. Given the current focus of adult literacy practice on functional literacy and the extensive use of skill development workbooks and individualized instruction, this appears to be the most feasible of the three approaches. When consciously applied this approach employs an "apprenticeship" model of teaching which is carefully designed to make explicit what are often tacit or hidden processes. This approach requires that teachers think through what is involved in mastering a particular academic subject, and that they consciously attend to these skills and dispositions in their teaching. Although the focus of the instruction is clearly on the subject-matter content of the academic curriculum, students indirectly acquire knowledge of learning strategies via several sources.

One source are suggestions published as part of lessons in workbooks. For example in Steck-Vaughn's GED 1988 workbook on reading literature and the arts, sections of the text are highlighted which provide "hints" and "tips" to students. One such tip was provided on test taking, "As you take the GED Mini-Test, relax. Remember it is designed to help you build your confidence in test taking. Set your goals for this test. Then use the Answers and Explanations to help you analyze how you did" (p. 22). An example of a "hint" was provided on a section on reading poems, "Remember that poets often write on more than one level at the same time. When you read a poem, try to find all the levels, literal and figurative, before you decide what the poem means" (p. 93).

A second source involves the utilization of instructional approaches which facilitate the internalization of habits in the effective use of learning strategies. For example, Staab (1990) argues that such strategies can be taught in a Whole Literacy learning environment. Through "mediated learning" literacy teachers not only create the environment for learning but also mediate the learning process for individual students within that environment. This process involves subtle, yet definite, mediation on the part of the teacher, i.e., "leading from behind" by which the teacher discovers what a student is attempting to do and helps the student to accomplish it. This mediation, however, must always be relevant to what the student wants to know or to do and must always be in the context of a meaningful learning situation. For example, in a reading and writing class, teachers can create learning environments in which to "Studentwatch" by filling the classroom with good literature--including books authored by students, meaningful print, hands-on projects, and exciting science experiments. Also, time should be provided for a variety of exercises, e.g., shared reading, individual reading, reading aloud to students, and for writing. As students work through various exercises, e.g., short stories written by students, truncated close paragraphs, pattern writing, etc., the teacher uses FYIs to help them to use such strategies as syntax, semantics, phonics, and

number of letters by asking them to think about what sounded right, what made sense and what the beginning sound might be.

THE IMMERSION APPROACH

The immersion approach is similar to the indirect approach in that the principles of appropriate learning strategies are not made explicit, and an in-depth understanding of content constitutes both a necessary and sufficient condition for their development. The immersion approach assigns as a high priority the content of students' thoughts (Prawat, 1991). It reasons that when individuals are fully engaged in trying to think through something, it may be counter-productive to have them focus too much on process. Therefore the approach identifies two preconditions for the acquisition of learning strategies and skills: students must feel free to pursue knowledge, and they must possess the intellectual "tools" (i.e., the concepts or ideas) that allow them to do so (Prawat, 1991). Although these preconditions are also recognized by the other approaches, advocates of the immersion approach assign a much higher priority to the role of ideas in the learning process. Prawat (1991) argues that ideas are considered to be the most important intellectual resource in influencing how we think about important phenomena. They serve as "lenses", directing our attention toward important aspects of the environment--allowing us to locate and extract information that otherwise would be overlooked. Ideas "educate attention" so that we can access the rich information present in the environment while at the same time building upon existing knowledge.

Powerful ideas are the key to unlocking the social and cultural worlds of students via the study of science, art, literature, history, etc., but not when taught as products that one commits to memory and later repeats on tests. Students often learn about ideas, but they seldom are shown how to use ideas to describe and explain objects and events in the environment (Prawat, 1991). Learning strategies are taught in the context of their application as tools that help one understand the specific phenomena. The goal in such a context is to encourage the simultaneous development of a holistic conceptual understanding and a highly differentiated sensory awareness of the learner's environment. Discourse plays a central role in this regard.

The teacher focuses on how students frame their responses to problem-posing questions. As the teacher considers students' hypotheses about a specific problem situation, the focus is on the ideas students express, not on the quality of the thought process itself. Based upon this on-the-spot assessment to diagnose students' misconceptions, the teacher makes adjustments in the presentations that allow students to resolve their own "perceptual" problems.

Shore's (1987) discussion of language teaching provides an example of the immersion approach. He experimented with the theme of "work" as the subject matter for the program, and his approach combined the activities of composing, editing, verbalizing, conceptualizing and reading. It moved from the biographical backgrounds of students to considerations of work-oriented changes in society as a whole. The approach utilized several techniques that were effective in facilitating within students learning and studying habits that made them more successful learners. For example, **Free Writing** was used to develop composing skills. Students were asked to write for a timed period, without stopping to correct. This spontaneous exercise helped to develop compositional fluidity, however, it was not read, corrected or graded, by the teacher. **Autobiography** utilized memory and the power to make mental images as concrete initial resources for deepening literacy, and developing self-confidence and awareness. Two provocative themes on which students wrote willingly were "the worst teacher I ever had" and "the most dangerous moment in my life". **The Self-Correcting Voice** requested students to write a composition answering the question: What is the worst job you ever had? Voicing is a self-editing tool that calls on students to use

the natural grammar in their speaking voices which automatically correct errors made by their writing hand.

CONCLUSION

A range of tools have been identified which allow practitioners to focus on the means through which adult literacy students can become more successful learners. The ten conceptual areas of learning strategies problems identified by Weinstein et al. (1988) provide criteria for identifying students with specific learning strategies difficulties. The three approaches to integrating learning strategies into the academic curriculum provide alternative means to help students "learn how to learn". However, each approach has distinctive advantages and disadvantages that must be taken into consideration as practitioners attempt to operationalism them.

LITERATURE CITED

Amstutz, D.D. (1988). Reading: Literature and the Arts. Austin, TX: Steck-Vaughn Co.

Conti, G.J. (1985). The relationship between teaching style and adult student learning. Adult Education Quarterly, 35 4, 220-228.

McCombs, B.L. (1988). Motivational skills training: Combining metacognitive, cognitive, and affective learning strategies. (in Weinstein et al. (Eds.) Learning and Study Strategies. San Diego, CA: Academic Press, Inc.) pp. 141-169.

Prawat, R. S. (1991). The value of ideas: the immersion approach to the development of thinking. Educational Researcher, 20 2, 3-10 & 30.

Staab, C.F. (1990). Teacher mediation in one Whole literacy classroom. The Reading Teacher, 43 8, 548-552.

Shor, I. (1987). Monday morning fever: Critical literacy and the generative theme of 'work'. (In Shor, I. (Ed.), Freire for the Classroom: A Sourcebook for Liberatory Teaching.) 104-121.

Weinstein, C.E., Goetz, E.T. and Alexander, P.A. (1988). Learning and Study Strategies. San Diego, CA: Academic Press, Inc.

THE GREAT TRADITION REVISITED: A REVISIONIST VIEW OF THE HISTORY OF ADULT EDUCATION IN AUSTRALIA

Roger Morris[1]

ABSTRACT. While the great tradition view can provide a reasonable explanation for the general pattern of development of Australian adult education, it obscures as much as it explains. There have been a number of significant more local, more radical, and more practical initiatives in the Australian practice of adult education. It is these initiatives which should be built upon in developing a sound body of local theory that is more appropriate to the needs of Australian adult educators and learners.

INTRODUCTION

The best and most complete exposition of the great tradition interpretation of the development of Australian adult education was presented by Dr. Derek Whitelock in his book, The great tradition: A history of adult education in Australia (1974). In his study, Whitelock strongly emphasized the continuity in the Australian context of the nineteenth century English educational ideal - the ideal of the "liberally educated person", "the cultured adult" - as the ultimate outcome of successful adult education. The work of Matthew Arnold, J H Newman and the more specific adult educator advocates of such an outcome, Mansbridge, Tawney, and Raybould, are cited as the major intellectual influences on the development of the field in Australia as well as in Britain. Of course, such adult education is not necessarily without important social and other purposes. But there is a heavy insistence that the major purpose must be a liberal one and that adult education should be non-vocational and non-credit. Advocates of these points of view like to distinguish between ADULT EDUCATION as a particular type of narrowly defined educational provision and the **education of adults** which is merely educational activities engaged in by adults. This paper argues that this point of view presents an incomplete picture of the history of Australian adult education. Further, that this incomplete picture has retarded the development of a body of Australian adult education theory firmly rooted in local practice.

THE GREAT TRADITION VIEW OF THE DEVELOPMENT OF AUSTRALIAN ADULT EDUCATION

The earliest attempts at adult education in the Australian colonies, it is claimed, were highminded, wrongheaded and almost completely unsuccessful. These attempts, largely by the missionaries of the London Missionary Society were designed to civilise the Aborigines and the convicts. The same sort of thing was being pursued in England among the working classes and paupers. Adult pupils were provided with basic instruction in the Bible, reading and writing, arithmetic, and practical agricultural and household skills. It was an elementary school curriculum being taught to adults who had not attended school. These attempts generally failed and soon exhausted the goodwill of the missionaries and the governmental sources of funds.

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In regard to the Mechanics Institutes, Schools of Arts, or Literary Institutes, the Australian colonial experience, it is argued, paralleled that of England and the United States of America. They rapidly moved from vocational and practical to liberal and cultural. Control over their activities moved quickly from the working class to the middle class. Finally, they went into a steep decline except where they became part of the formal educational system. Whitelock outlines the history of the Mechanics Institutes in four phases. The 1830s and early 40s, he saw as the hey-day of the original Birkbeck/Carmichael principle of moral improvement through the acquisition of useful knowledge. In the late 1840s, economic depression and a loss of working class support eroded the early emphasis on practical knowledge. From 1850 to 1880s, there occurred a great revival fuelled by middle class support as the institutes changed their nature and diversified into lending libraries, billiard rooms, lectures by famous visitors, concerts and other entertainments. Beginning in 1890 and continuing through to the present, there was a decline into almost total extinction with only a few institutes surviving as billiard rooms and/or lending libraries with halls for hire. At their peak there were more than 1,000 institutes throughout Australia (about one for every 4,000 people).

University extension was another British importation. The Universities of Melbourne and Sydney set up University Extension Boards in 1890 and 1892 respectively. However, the courses were generally very short, not demanding and not controversial. The lectures were in many cases not much more than entertainments, popularizing in an undemanding way, part of regular courses - "mental philosophy", ancient history, literature, popular science and engineering. These were soon very successful. The University of Melbourne had three times as many extension as internal enrolments. Extension activities, Whitelock claims, were established by the Universities for a number of reasons including: the British precedent; the need to improve the public standing of the universities in the wider community; political expediency; and a genuine concern for social improvement through the education of workers. In general, most of the really quite modest aims of the Extension Boards were achieved, except for, the most radical one, which had to do with reaching the workers.

Early in this century it appeared that this problem was about to be addressed, using another imported English model. The WEA was soon established in all but one state after the visit of Albert Mansbridge in 1913. Only in two states, New South Wales and South Australia, does the WEA survive to the present day. The philosophy promoted by Mansbridge and faithfully propagated by Dave Stewart, the Secretary of the NSW WEA from 1913 to 1954, held that workers' education should be something ideal in itself, unpolluted by worldly aspirations. But the identity of the movement as a workers' association led to it being attacked from both the left and the right. The WEA often appeared to be political suspect to some in government and education. Some workers and their organisations mistrusted the WEA's championing of free enquiry and its insistence on political evenhandedness. However, possibly its greatest fault, from a strictly educational point of view, was the adoption by the movement of confused ideas of excellence and the superiority of liberal learning to all other forms of study. The NSW WEA worked in close cooperation with the Department of Tutorial Classes at the University of Sydney. This soon became the standard mode for the great tradition provision of adult education in Australia - a partnership between the University and some sort of voluntary association - a very British model.

To the proponents of the great tradition view, the Australian Army Education Service (AAES), established during the Second World War, was a full scale experiment in comprehensive adult education which affected a broad cross section of Australian society and provided a most striking practical demonstration of the potential of liberal studies. The Australian Services Education Council was established to oversee the Service. Those involved in the Council and Service read like a "who's who" of post-war Australian adult education. Once again adult education was seen as a magic wand to change people - to improve

them. Army lecturers were given great freedom to discuss controversial topics. The Service was to many the epitome of liberal adult education in Australia.

The post-war period was a period of steady decline for the supporters of the great tradition view as their claims came under increasing scrutiny. The 1944 Sydney Conference on the Future of Adult Education was characterized by optimism and ambition. A full scale nationwide model of adult education was proposed. Nothing really came of it, though some state boards were established, survived for varying periods of time, and went. Universities continued to make some provision. The WEA continued in some states. The Council of Adult Education was established in Victoria as a large semi-governmental provider. In 1960 the first national association was formed - the Australian Association of Adult Education (generally known as the AAAE). This national association grew out of meetings of heads of university departments, WEAs, and semi-government bodies. These meetings and the constitution finally adopted reflected the suspicion of centralization and fear of democracy and the fondness for feud which had long characterised Australian adult education at the organisational level. The major division continued to be between the proponents of the liberal tutorial classes tradition mainly in NSW and others, who represented new forms and priorities, notably CR Badger, Director (1947-1972) of the Victorian Council of Adult Education.

Over the 1960s things continued much as before. However, a dramatic event occurred in 1966 when the report of the Universities Commission recommended that from 1969 the adult education activities of Universities should cease to be government funded. A deeply divisive dispute over the purpose and role of university-based adult education quickly blew up. This dispute reactivated and deepened divisions between adult educators. At the end of 1967, the Federal Government decided that those universities wishing to continue to provide adult education could so do. But the controversy was unhelpful and many universities began to decide that they would be better off out of the field.

By the 1970s the great tradition definition of adult education was becoming increasingly untenable as more and more effort was devoted to the "education of adults". It began to be accepted, even among the more traditional, that adult education encompassed trade union education, industrial and commercial training, agricultural extension, community education, aspects of health education, ABE, ESOL, and CPE. However, it should not be thought that the great tradition survived unchallenged until the 1970s when it rapidly fell away in the face of much changed circumstances. Over the years, there had been a number of developments which challenged the great tradition view of the essentially derivative nature of Australian adult education.

A REVISIONIST VIEW

The great tradition view of the development of Australian adult education, while it, in general, provided a fairly accurate if somewhat narrow picture, failed to give due emphasis to the more working class, more radical, more indigenous, and more practical aspects of that development. Australian adult education, as it developed; was more than just a remote branch of British adult education just as Australians were more than "Austral Britons". In this paper only a few examples of such initiatives can be mentioned: the socialist schools; technical and vocational adult education; and external studies.

A SOCIALIST SCHOOL

If adult education is a process that aims at providing ordinary men and women with the knowledge, skills and attitudes that will enable them to increase their control over the world in which they live, then the Victoria Socialist Party was a leading adult education body in Australia in the period from 1905-1930. So wrote Dr. Lloyd Ross - academic, adult educator, adviser to Labor Prime Ministers, trade union leader

(the Australian Railways Union) and son of RS Ross who was one of the founders of the Victoria Socialist Party (VSP). This account of the adult educational activities of the VSP draws heavily on the work of Lloyd Ross (1945 and 1983). The VSP was a school for agitators, a community centre for socialists, a training ground for labor politicians and trade unionists, a political organisation which included among its members poets, economists, politicians, agitators, rationalists, and christians - supporters, fellow travellers, and even critics of socialism.

The activities of the VSP at its peak included a weekly newspaper, a socialist Sunday school, a choir, an orchestra, a brass band, a co-operative store, a bakery, a co-operative boot store, a savings bank, socialist scouts, a dramatic society and a football club (the Ruskin Club). However, the centre piece of the Party's activities was the regular Sunday afternoon meetings at the Gaiety Theatre. These meetings attracted up to 1000 participants who heard lectures on topics such as: Confucius, the Great Chinese Teacher; Socialism in Germany; The Development of Japan; The Churches and Socialism; Recent developments in Science; The Great Buddha; and Swedenborgianism. As well as the full range of local Australian speakers, there were a number of prominent overseas lecturers - Ben Tillett (leader of the Dockers' strike in 1889), Keir Hardie (founder of the Independent Labour Party), Ramsay McDonald (later Labour Prime Minister), Albert Mansbridge (founder of the WEA) and, from the USA, W T Mills (socialist author of The Struggle for Existence).

The VSP declined as socialist opinion became increasingly divided and sectarian. To take but one example, Edgar Ross, Lloyd's brother, became a militant Communist leader of the Miner's Union while Lloyd went on to be an adviser of Labor Prime Ministers - including the VSP's most "successful" student, John Curtin, Prime Minister of Australia during the Second World War.

TECHNICAL AND VOCATIONAL ADULT EDUCATION

The Sydney Mechanics School of Arts (SMSA), although not the first established, is the longest surviving of any mechanics institute in Australia, having celebrated its 150th birthday in 1983. Today its role is mainly limited to providing a lending library service (specializing in light fiction) to city workers but it has had an eventful past and has spawned a large technical college and indirectly two universities.

The SMSA right from the beginning offered lectures and classes in commercial, engineering, scientific and cultural subjects. In the 1850s and 60s, largely under the urging of Professor Woolley (first Principal of the University of Sydney), plans were made to establish a full scale working man's college. This proposal received the support of the NSW government and in 1878 the Working Man's College was established. It opened in 1879 with 500 enrolments. Next year this number grew to 1000 (at least 400 of whom were manual workers) and doubled again in 1881. But there was some debate as who should manage technical education and where it should fit in the community's general scheme of education. In the end, no one regarded a voluntary association as suitable to the task - not the trade unions, not the employers' organisations, not the government and not even the SMSA itself thought that it should do this work. In 1884 the government established a Board of Technical Education which took over the Working Man's College which had been renamed the Sydney Technical College (Snell, 1984).

Even though technical education placed a strong emphasis on practical and vocational learning, learning that could help the conscientious worker to improve his/her position, it would be a mistake to conclude that learnings of a wider more general nature were excluded. Laurent (1990) provided a great deal of evidence to show that scientific subjects were often the most popular regardless of student occupations which frequently had little obvious connection with such studies. He suggested that people attended these classes largely out of interest and a desire to know and understand the world better.

EXTERNAL STUDIES

One of the best known histories of Australia is called The Tyranny of Distance. Australia is a large country with a relatively small population (about 16 million persons today). It was principally for this reason that a most successful and indigenous form of adult education was begun in Queensland as long ago as 1911 under the name of external studies (Dunton, 1970).

When the state of Queensland came to establish its own university, it was soon realised that very few of the state's scattered inhabitants would be physically able to attend classes. The state parliament wrote into the university's founding act that graduation must be placed within the reach of persons unable to attend lectures. When the university commenced operations in 1911 there were students enrolled for correspondence courses. The structures established and the methods adopted followed no overseas model but were a grassroots response to a local problem. Other states followed suit. It would be good to be able to praise the state governments for their foresightedness and commitment to adult education principles, however, their actions were motivated by a much more practical aim. Here was a means whereby underqualified public servants, especially school teachers, were to be educated in their own time, largely at their own expense and therefore at a minimum cost to the government - their employer.

As the years have passed the largely printed materials of the early days have been supplemented by various innovations, local tutorial meetings, residential schools, external students hotlines, counselling, teleconferencing, audio cassettes and videotaped materials. Australian universities have done much of which they can be proud in bringing university education within the reach of all citizens no matter how geographically isolated they may have been.

Many other examples of adult education activities could be quoted including various forms of study circle type activity, trade union and labour education, residents action, mass movement education and the self-education efforts of Australians of Aboriginal descent. However, the three examples outlined above are sufficient to point to the inadequacy of the great tradition view as a complete picture of the development of Australian adult education.

CONCLUSIONS

If the real position was as this paper has described it, then how did the great tradition view manage to maintain its position as the accepted view? Much of the persistence of this view can be explained by the fact that Australian adult education continued until the 1970s to be narrowly defined within the English liberal amateur tradition by those predominantly English and later New Zealander academics who continued to staff the university departments of adult and continuing education.

These academics stressed the similarities and continuities with the "mother country" and overlooked the differences. In keeping alive the one true faith, they ignored important local initiatives and developments. They also ignored the experience of other similar nations. Except for one visit in 1934 and another in 1936 there were no direct personal links maintained with adult education activities in North America between 1913 and 1955. Others would go further and claim that the use of an inappropriate imported British model retarded the development of adult education in Australia. This system placing as it did the university adult educators centre stage allowed their concerns to set the adult education agenda for much of the period. Organised adult education frittered away the energies of its enthusiasts in petty jealousies between organisations and bitter internal rivalries (Alexander, 1959).

Today this situation is much changed and much broader definitions of adult education prevail. In 1990, the national association renamed itself the Australian Association of Adult and Community Education.

There is beginning to be developed an authentic body of useful theory firmly rooted in local practice. The achievement of this difficult task will be assisted by a clearer understanding and a deeper appreciation of the more unique aspects of the historical development of adult education in the specifically Australian context.

LITERATURE CITED

Fred (1959). Adult education in Australia: An historian's point of view. Melbourne: FW Cheshire.

Duke, Chris (1984). Australian Adult education: Origins, influences and tendencies in Canberra Papers in Continuing Education. Canberra: ANU Centre for Continuing Education.

Dunton, A.F. (1970) "The Australian experiment in teaching external students at universities", in D. Whitelock (Ed) Adult education in Australia. Rushcutters Bay: Pergamon Press, pp 187-199.

Johnson, R. (1983). The provision of external studies in Australian higher education. Canberra: CTEC Evaluations and Investigations program.

Laurent, John (1990). "Non vocational technical education in NSW, 1880-1914" Australian Journal of Adult and Community Education, Vol. 30, No. 1, April 1990, pp 13-21.

Ross, Lloyd (1945). "The education of John Curtin", Australian Highway, Vol. XXVII, No.4 August, pp 49-51.

Ross, Lloyd (1983). John Curtin. Melbourne: Sun Books.

Snell, Graham R (1984). "The Sydney school of arts: 150 years of community service", Riverina Library Review, Vol. 1, No. 1, Autumn, pp 36-46.

Warburton, J.W. (1963). "Schools of arts",Australian Quarterly, Vol, XXXV, No.4, December, pp 72-80.

Whitelock, Derek (1974). The great tradition: A history of adult education in Australia. St. Lucia: University of Queensland Press.

IN THEIR OWN VOICES: ADULT LEARNERS ON WRITING
A STUDY OF NONTRADITIONAL GRADUATE STUDENTS' STORIES ABOUT WRITING

Margaret T. Reif[1]

ABSTRACT. Brings the two worlds of teaching adults and teaching writing together through the vehicle of qualitative research. Nontraditional graduate students tell their stories about writing in extensive interviews and through class assignments. Today, adults are swelling the student ranks in higher education. Large numbers of these learners are not prepared to write academically or professionally. Many are afraid to write; most were never taught that writing is a process. These adults share their past struggles, their fears, and their successful strategies for tackling writing. They verify that adult learning theories, when coupled with the process writing approach, result in confident, coherent writing. Adult learners will find themselves in the stories about writing attitudes and writing rituals; they will want to try the composing approaches described by the interviewees. Adult educators will learn that self-esteem and confidence are motivators in the writing process for these nontraditional students. They will be moved to talk to their own students about writing. This study combines adults talking about writing and workable teaching techniques based on those voices.

INTRODUCTION

Adults are returning to school in record numbers. Apps (1988) predicts that 49 percent of the students in higher education in 1992 will be twenty-five years old or older. Cranton (1989), Cross (1981), and Knox (1986) characterize the problems these adults bring to learning as situational, institutional, and dispositional. Situational problems might include cost, time, transportation, and child care. Institutional concerns include course availability, length of the degree program, or enrollment red tape. Dispositional barriers are those related to attitudes and self-perceptions as a learner.

Many adults are afraid they are too old to learn or lack the needed confidence to learn (Beder and Darkenwald, 1982). Adults often set unrealistic goals or think their study skills are too rusty to compete in the higher education setting One of the major stumbling blocks for adult learners is writing. Americans in general are writing less and less; many turn to writing as a last resort. College and graduate faculties are frustrated reading their students' work, and the adult students are often painfully conscious of these frustrations. A writing crisis exists on campuses around the country (Graves, 1984; Gregg and Steinberg, 1980).

BODY

Adults are willing to share their past struggles, their fears, and their successful strategies for composing which in turn promotes confidence. Several researchers in the writing field (Becker, 1986; Flower, 1981; Knoblauch, 1989; Shaughnessy, 1977) urge instructors to talk and work collaboratively with students to discover efficient ways of presenting needed skills. Knowles (1984) supports tapping the students' experiences as resources for learning.

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The students interviewed willingly shared their attitudes about writing. Some enjoyed writing because they had been positively rewarded throughout their academic lives, wrote frequently in their personal and professional lives, or were confident of spelling, grammar, and other writing rules. These attitudes are supported by research (Lent, Brown & Larkin, 1986; Tracey & Sedlacek, 1985) showing several self-evaluative concepts, such as academic self-concept and self-efficacy estimates, have been found to relate to achievement and persistence in college.

Some hated writing because graduate-level writing appeared unattainable, they were poor at grammar and spelling, they had received negative comments on their writing throughout their schooling; consequently, they avoided further writing, or they equated criticism of their writing with criticism of themselves which resulted in poor self-esteem. The interviewees who had avoided writing because of poor grammar skills ranged in age from 25-41, so they attended elementary, junior and senior high in the mid-fifties through the late-seventies. The attitude about grammar's importance in learning writing is understandable for the older students because there were no studies to the contrary. However, starting in 1963, research was available that showed, "the teaching of formal grammar has a negligible, or because it usually displaces some instruction and practice in actual composition, even a harmful effect on the improvement of writing" (Braddock, Lloyd-Jones & Schoer, 1963, pp.37-38). Obviously those instructors maintained the beliefs they had been taught to the detriment of these particular graduate students. Also, researchers have found that students who fear writing will avoid courses with writing requirements and may even avoid careers where writing is required (Rose, 1984). Finally these findings are supported by adult-learning theorists Brookfield (1988), Knowles (1984), and Wlodkowski (1985) who support the confidence-motivation-learning link.

The interviewees cited the learning climate and process writing as essential components in improving their writing skills. Cross (1981) stated, "We no longer have a theory of adult learning, but rather, a theory of instruction purporting to offer guidance to teachers in general" (p.221). This aptly describes the teaching-learning climate in the writing courses which use the writing process approach (Elbow, 1973; Flower, 1981; Hillocks, 1986; Murray, 1978). The educator encourages the students to think and talk into writing, to employ a prewriting strategy before writing the first or final draft. The class is encouraged to experiment, explore, read and revise each other's work, examine models, incorporate personal experiences, challenge the constraints of the assignment. Together they learn that writing is a non-linear process, a problem-solving activity, a thinking activity. This learning environment encourages the students to become "reflective practitioners" (Schon, 1982), while the instructors coach from the sidelines.

CONCLUSIONS AND RECOMMENDATIONS

Ten suggestions to improve teaching writing to nontraditional students also apply to the broader area of all adult learning. The ten points represent the repeated themes derived from the 43 interviews and from the personal documents and personal narratives of an additional 100 subjects.

1. Talk to students about writing. How do they feel about it? Why do they feel this way? Are there other students in the class with similar experiences?
2. Teach all of the prewriting strategies. The class represents a diverse collection of learning styles with a variety of life experiences. Brainstorming may work for one person, but tape recording may be the answer for three others. Some may need to visualize their papers by drawing a mind map before writing; others may outline because their tenth-grade teacher insisted on it.
3. Share personal and professional writing with the students. Once they know the instructor struggles and revises and edits, the students know they have an ally in the writing process.
4. Encourage cooperative learning. Students read their papers to each other and suggest revision and editing tips. They observe how other adults approached the assignment and learn to be more

critical of their own writing style. This encourages independent learning and offers active student involvement.

5. Conference with each student when returning assignments. This can be an informal 3-5 minute chat or could be a formal 15-30 minute appointment to discuss corrections and set writing goals for the next assignment. This approach adds the nonverbal language missing in written comments; it puts the sender" in the communication event between instructor and student.
6. Carefully construct corrections and comments. Adults' fragile egos are at stake. It is more important to point out one or two areas to work on rather than "red mark" the entire paper. Building confidence is the first step toward more critical editing and coherent writing.
7. Give permission to make mistakes. Some students may need to hire an editor, not a person to write the papers, but someone to polish the final draft. Some students are so inhibited by the rules that they can not get to the content.
8. Offer clear yet flexible guidelines. Adult learners' busy life styles require deadlines, clear syllabi, opportunities for individual interpretations. Some of the students might have a more creative, interesting approach to the assignments than the instructors have considered.
9. Find real-world applications for writing. Adult theorists emphasize that learning is made meaningful through application and immediate use.
10. Keep an open mind. The adult learners often suggest innovative approaches to the course assignments and contribute additional articles or resources. If it works for an individual student it has value as an acceptable strategy even though it is unsanctioned by empirical research.

LITERATURE CITED

Apps, Jerold W. (1988). Higher education in a learning society. San Francisco: Jossey-Bass.

Becker, Howard S. (1986). Writing for social scientists. Chicago: University of Chicago Press.

Beder, H.W. and Darkenwald, G.G. (1982). Differences between teaching adults and pre-adults: some propositions and findings. Adult Education, 33, 142-155.

Braddock, R., Lloyd-Jones,R., & Schoer, L. (1963). Research in written composition. Champagne, Ill: National Council of Teachers of English. (ERIC Document Reproduction Service No. ED 003 374.)

Brookfield, S. (1988). Understanding and facilitating adult learning. San Francisco: Jossey Bass.

Cranton, Patricia. (1989). Planning instruction for adult learners. Toronto: Wall & Thompson.

Cross, K. Patricia. (1981). Adults as learners. San Francisco: Jossey Bass.

Elbow, Peter. (1973). Writing without teachers. New York: Oxford University Press.

Flower, Linda. (1981). Problem solving strategies for writing. New York: Harcourt, Brace and Jovanich, Inc.

Graves, Donald. (1984). A researcher learns to write. Exeter, NH: Heinemann Educational Books, Inc.

Gregg, Lee W. & Steinberg, Erwin R. (Eds.). (1980). Cognitive processes in writing. Hillsdale, NJ: Lawrence Erlbaum Associates, Publishers.

Hillocks, George Jr. (1986). Research on written composition. Urbana, IL: National Council of Teachers of English.

Knoblauch, C.H. (1989). The teaching and practice of professional writing. In Myra Kogen (Ed.), Writing in the business professions (pp. 246-66). Urbana, IL: NCTE.

Knowles, Malcolm. (1984). Andragogy in action: Applying modern principles of adult learning. San Francisco: Jossey Bass.

Knox, Alan B. (1986). Helping adults learn. San Francisco: Jossey-Bass.

Lent, R.W., Brown, S.D., & Larkin, K. C. (1986). Self-efficacy in the prediction of academic performance and perceived career options. Journal of Counseling Psychology, 33, 265269.

Murray, Donald. (1978). A writer teaches writing. Boston: Houghton Mifflin Co.

Rose, Mike. (1984). Writer's block: The cognitive dimension. Illinois: Southern Illinois University Press.

Schon, Donald. (1982). The reflective practioner. New York: Basic Books, Inc., Publishers.

Shaughnessy, Mina P. (1977). Errors and Expectations. New York: Oxford University Press.

Tracey, T.J. & Sedlacek, W.E. (1985). The relationship of noncognitive variables to academic success: A longitudinal comparison by race. Journal of College Student Personnel, 26, 405-410

Wlodkowski, Raymond J. (1985). Enhancing adult motivation to learn. San Francisco: Jossey-Bass Publishers.

THREATS AND PROMISES: WORKER VIEWS AND IDEOLOGY OF EDUCATION AND LEARNING

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ABSTRACT. This paper examines how workers act on their views of education and learning as evidenced in the everyday context of factory work and past schooling experiences. The context illuminates the tensions and contradictions inherent in the structures of work and social relations. Resisting the mechanisms of control and domination workers become determined to learn the skills they need to succeed. As resolute learners they challenge the factory environment by using human agency and ingenious methods to pursue resolute learning. Learning is mediated not only by reflections on the social relations of their schooling experiences but, more importantly, the present moment where obstacles to participation are evident. Engaging in future education must account for the multiple dimensions and contradictions that exist between understanding and action.

INTRODUCTION

> "Going there everyday and not knowing if it's going to be your last day. There is no choice, I'm not going to have a choice, I'm going to have to change. I'm going to have to do something because we are at a turning point now....The time is at hand and I have to do something and it has to be now" (Ricardo).

These are the words of a midwestern urban factory worker faced with impending layoff due to the corporation's decision to move production and capital. This worker, like scores of others, has lived with the lay off, call back cycle for a number of years but this time there is talk of shutdown and relocation. This time there is a real possibility that Ricardo will not be recalled. Recognizing that change is inevitable each worker must reassess his/her situation.

> "Things don't look that good. Maybe you're going to have to change, you know, career or go to school unless you want to keep on this callback, laid off, callback, laid off...It's just unnerving, the fear of the unknown" (James).

Forty factory workers who were "bumped" out of their jobs voluntarily attended a series of union sponsored career workshops. As participant observers, the researchers gathered data and conducted subsequent in- depth interviews with eight individuals. While the concerns of layoff are expressed differently, all convey a strong sense that once again the actions of the company have directly and overwhelmingly affected their lives in negative ways.

Carnoy & Levin (1980, 1985) points to complex interactions among economic and social forces which result in contradictory relations between education and work. Bowles and Gintis (1976) link the process of education with the economic reproduction of skills and stratification. Recognizing control mechanisms based on their own experiences, workers press against the dominant culture through intentional agency

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(Edwards, 1979) thus producing their own reality. Resistance theory (Giroux, 1983) and central ideas of conflict, struggle and agency ground the tensions and contradictions that mediate relationships among home, schooling and the workplace (McLaren, 1985).

The diverse life experiences of these workers form the basis for individual beliefs of education, learning and subsequent action. Drawing on Giroux's major categories of experience and action to illuminate workers lived reality, we present their concerns of the control and contradictions they contend with as they contemplate future economic options. With these concerns in mind, we then examine the intentional actions workers engage in as they struggle against the tensions inherent in the stratified positions they hold in society. Finally, we suggest the construct of the resolute learner whose ideology of learning points to the promise of possibility.

SCHOOLING EXPERIENCE

As these workers completed their schooling and took their places in the factory, they have been reliving the same control and domination for which they were prepared in the classroom. As they now face changes due to the loss of their jobs, educational options are viewed not only in the context of the realities of work, but form an extension of these same elements of control and domination which can be traced back to earlier schooling experiences.

> "I had no college training in high school at all. I don't know if it's my fault or the teacher's fault to prepare you for college. In a way I blame the teachers you know but they don't know what you want to do" (James).

Unsure on where the blame lies, none the less, schooling as an institution for social maintenance prepared these workers for the factory life. Some workers blame themselves, others the school system and others the need to work.

> "I lost my mother and I had enough credits to graduate when I was a junior so I graduated and I went to work right away. So it was just like I didn't have in high school, I didn't have much of a chance to really find out; I qualified for scholarships, I won two scholarships but then there was just no money. And I had to work" (Jeanne).

The contradictions are often related to self attribution or factors of discrimination. Educational failure for Monique is experienced as structural inequalities which reproduce racial relations of subordination.

> "Well, when I was in high school, the worst memory I had was that all the light skinned people got the good grades. You know, we were, I wasn't dumb, but I was just noticing that they got they didn't have to study or anything. It's just that they were light or yellow people whatever, but they always were getting good grades and they didn't have to work for it. And that was one of the things that made me not feel like I was doing good in school. You're doing good in school and someone sitting next to you don't study and why is she getting an A and I'm getting a B, and she don't even study."

The notion of working hard did not pay off and, in fact, served only to reinforce the contradictions of schooling along with issues of power through racial inequities. The tensions between opportunity and limitations based on race are once more validated.

> "I hated school, but then, my parents weren't there for help, the teachers were idiots, not all of them. You had teachers that, you could hand in the same paper, could've been from another subject, and they'd put an A on it, so why bother doing it? So, I'm very poor in social studies, history, that type, and I got straight A's" (Sally).

Not only did the education system limit opportunities, these leveling expectations were further reinforced by parents and family. These experiences are not confined only to the secondary school system. Rita talks about her experiences as an adult enrolled in a nursing program.

> "It was hard for me to get back to studying especially with the family and then it was like I felt guilty. Then their father started in with it. He would make comments like listen to your college educated mother and so that kind took the thing, it was like, what am I doing this thing for he isn't acting like he's proud of me being in there and yet he was the one who pushed me there."

The mass education system as a reflection of the democratic capitalist system provide both the promise of mobility and choice while threatening those very promises. Too often for these workers schooling experience meant minimal support and limited opportunity. The symbolic power of the structural determinant of schooling facilitates the functioning of society by maintaining the status quo. From the varied schooling experiences these individuals now find themselves in a shared reality of factory life.

THE REALITIES OF WORK

> "They have a bad attitude about us. We come in and they think we're gonna take their jobs. Most of them are getting old anyway and they don't want us to do the jobs really. When we are walking around learning a job, they don't want us to learn the job, because they feel like we'll get the job and we'll do better on it and, therefore, the foreman will want you to do the job, but just we can't take it away from them - that's their job." (Monique).

The division of labor expressed by Monique is one way that the company divides and fragments the social relations of the workers and their jobs. It is men pitted against women, seasonal workers versus full time workers, and floaters positioned against departmental workers. Through keeping workers at odds, the workplace mystifies social interaction and relationships. Additionally, the company uses other means to keep workers off balance.

> "You know I have seen them put you on one job one minute and by the time you think you're going over there, they snatch you off and put you over there and by the time you think you're going over there, you look back and here they come again. You go there today and you'll work one place and you go back the next day and they tell you, you work over there. They think they got the right idea; they got the feeling like they are going to run us." (Joe).

Workers see the rules for what they are, attempts by the corporate structure to dominate the lives of workers. By keeping people from developing work predictability and stability, the changes in production can be accommodated while at the same time the power over the workforce is maintained. The view is that through these rules, workers can be run like machines. The voices of these workers, however, cannot be silenced.

> "They don't ask, they just slam a machine in and then you work it out. After that if your going to be able to work that way or not, sometimes to move your racks and things, it's too crowded. There's a machine jammed in too close they don't leave enough space. They don't think of asking the operators if that's enough space" (Rita).

Rita sees the domination and the control in stark terms. The power relations are a given. The corporation perpetuates control over workers by not considering the operator's views or incorporating worker perspectives into the design and the organization of the means of production. The contradiction is that these workers recognize corporate hierarchy and express indignation that their experiences are not used. Another worker vocalizes the oppressive corporate attitude this way.

> "It's like they really don't care about what happens to you. All you're there for is just do the work and that's it, that's all they really care about. At first it seemed like you could tell them something was wrong and they'd have somebody come over and check it out or whatever or you had the inspectors to go to and they would find out for you. Now you're kinda on your own and if they don't want to do anything about it they don't. They don't listen to you when something is wrong" (Theresa).

The work realities convey an unwillingness to ask for, or listen to, worker perspectives when problems arise. For these workers their lived work realities are shifting over time with increasing rules while the shared identification of problems and solutions is considered outside of their job boundaries. Requests for assistance and proposed solutions are ignored.

The threats and actions to eliminate jobs through introducing technology and moving production provide other means to expand and cement the domination the corporate culture exacts over workers. An irony here is that while it is the stated intent to bring in new technology, workers are not given the tools and assistance to run the machines now in operation. These perspectives are well documented by the realities these workers face each day and culminate in a gridlock situation.

These various forces intrude deeply into the lives of workers and weigh heavily on the working and personal dimensions of their realities. While the perspectives of the workers recognize that the disorganization of the workplace is increasing in its magnitude and intensity, the corporate culture of domination is clearly articulated to workers at the time they are hired. Jeanne told about her orientation session this way.

> "This woman came in with a great big flat truck piled at least five foot high with stacks of paper, and she looked at us and she said I want you people to know that when you walk through these doors, you better be the best employee that you can be because if you aren't, these are all job applications and these are the people who will take your place."

These attitudes communicate that a central concern of this corporate culture is to dominate and control workers, keeping them in their place. The outcome of this company attitude is that workers create means to resist, cease caring and alter the way they view their working roles.

RESOLUTE LEARNING

> "You don't get to update anything when you go from department to department things change and if you get back to that department again its, I always had them retrain me because I didn't want the chance of them saying oh no this is changed. I always made them show me again even though I knew that I knew" (Theresa).

The context of learning is inhibiting and without support, yet workers are resourceful. Rather than being pushed to the bottom of the production ladder, they invent ways of learning the skills they need to do the job at hand despite the current limitations of the situation.

> "You watch what other people do, how they run their machinery to get the knowledge because they usually don't tell you anything, even employees, because they don't want you knowing their job, because they are afraid you'll take it from them" (James).

While James learned by watching how machinery is run, Theresa is more resolute in facilitating her situation by sitting behind the veterans of the factory.

> "When I've had to learn new jobs I always tried to watch the highest seniority people. Even on my breaks I would sit behind them because most times they don't want to show you or whatever, so I just kind of watch and learn on my own. There are some that will help you and I just I've always let them show me and I would watch" (Theresa).

Their resolute action is informed by resistance to oppressive work structures. Production and reproduction present the catalyst for stepping outside the dominant paradigm thus reinventing their power and self-determination (Giroux, 1983). When ideology is linked with social struggle the actions taken illuminate knowledge as power and the interests that they further. Ideology enables action. McLaren (1989) suggests "The importance of understanding ideology as the production of experience cannot be underscored enough since such a viewpoint is fundamental to developing a project of possibility" (p.200). Here is one worker who understands her rights and acts on her beliefs.

> "Well, I'll tell you what, I says, I'll take the one that pays more money and does less work. I'm not stupid, I've already done the trucking, now I'll take the packing. And he says, well, you can't do that and I says, why, that's piece work job. I'm entitled to learn it. And I asked them, I says, well are you discriminating against me or what? And the minute that word came into effect, boy a lot of people came down and I said that same thing to them and I says, well I'm sorry, but nobody offered me the job. Unless I can prove I can't do it, I should be entitled to it" (Sally).

Contradictory relations continue, however, between understanding and action. Rita spoke of her past college experience and the pressures she received from her husband. When asked about the role of education in her future she commented strongly, "No, this is one old broad that don't want to be taught a new trick." Yet she tells of the "trick" she devised in her workstation to keep her job.

> "I was working four stations across the table and I would flip a pile and then I would, I can't explain it and my supervisor said what in the hell are you doing, why this pattern? I got the same end result and I worked forwards and I worked backwards and I hoped to keep on working them so I didn't want someone else to find out it was a good job so confuse them, make them think its rough and actually it wasn't. I had my riddle and its worked out."

Although engaged in resolute learning the notion of utilizing further education is not easily solved one way or another. As evidenced by Rita's comments, and voiced by others, there is no simple cause and effect between past schooling, present learning and future education. The reciprocal relationships among the economic, the political and the ideological are complex and uneven.

When we talked with these workers about the role that education plays in their future planning, their lack of enthusiasm for education could presuppose a lack of enthusiasm for learning. However, their voices clearly articulated the multiple ways that they engage in learning. According to Quigley (1990) while human resistance takes place with different degrees of visibility, neither learning nor objective knowledge is ever resisted.

Unequal relations of power present two options: accommodation or resistance. The intentionality of the resolute learning engaged in by these factory workers is informed by experience and resistance to the status quo and spotlights the multiple dimensions and contradictions that exist between understanding and action.

A paradox exists in this shared culture, nonetheless, as the tensions that inform their strategies become clear. Identifying "other workers" as the intervention rather then problems with the capitalist system, it appears that, these factory workers become socially fragmented as they are placed in opposition to each other. The current arrangements are maintained as mediated by the distrust and suspicion of coworkers.

CONCLUSIONS

In an effort to address inequitable power relations, workers press against structures and mechanisms. This resistance is informed by a reaction to the injustices they recognize. Unable to work within the systems to meet their desires for opportunity and mobility, workers find ways to equalize the balance in a system of constant contradictions. While simultaneously displaying outward conformity to the corporate culture, these workers resist the code of individualism through direct human agency and intentionality, using ingenious methods to pursue resolute learning.

Worker views and ideology of education and learning informed by the complex contradictions of past schooling and the current working environment cause these individuals to develop strategies that challenge the status quo. The findings of intentional learning engaged in by the factory workers in this study supports the notion that domination is never complete. The concept of resolute learning must inform adult educators as pedagogy is developed. Rather than pursuing educational practice that compromises individual integrity and justice or limits education to measurable skills, resoluteness of purpose used for learning can challenge people to solve the inequalities in their everyday lives. Adult education needs to use the contradictions of power relations and social fragmentation to regenerate shared social relations.

The ideologies governing structures of control and domination within corporate cultures need to be recognized and addressed. For adult education this translates into examining and using contradictions, tensions and conflict to more clearly understand and act in the interests of social justice. The implications for research and practice are that hidden assumptions of power must be reexamined as we pursue understanding of the students we wish to serve, the research questions we frame and the practices we implement.

The critical notion of human agency and intentionality coupled with experience interact as key links between structural determinants and lived effects (Giroux, 1983, McLaren, 1989). Human agency and intentionality are potent means to facilitate self empowerment for people to collectively act and engage in contextual learning pertinent to their lived experiences. While these terms are in vogue, resolute learning or going about learning what is important in spite of the environmental, cultural and structural conditions indicate that workers are not simply silent, or accommodating but actively resist the social reproduction exacted by unequal power relationships, domination and control, whether in educational or workplace settings.

LITERATURE CITED

Bowles, S. & Gintis, H. (1976). Schooling in capitalist america. New York: Basic Books, Inc.

Carnoy, M, Levin, H.M. & King, K. (1980). Education, work and employment. Paris: Unesco: International Institute for Educational Planning.

Carnoy, M. & Levin, H.M. (1985). Schooling and work in the democratic state. Stanford, CA: Stanford University Press.

Edwards, R. (1979). Contested terrain--The transformation of the workplace in the twentieth century. New York: Basic Books, Inc.

Giroux, H.A. (1983). Theory & resistance in education-- A pedagogy for the opposition. South Hadley, MA: Bergin & Garvey Publishers, Inc.

McLaren, P. (1989). On ideology and education: Critical pedagogy and cultural politics of resistance in Critical pedagogy, the state and cultural struggle, H.A. Giroux and P. McLaren (Eds.). Albany, NY: State University of New York Press.

Quigley, A. (1990). Hidden logic: Reproduction and resistance in adult literacy and adult basic education. Adult Education Quarterly, 40(2), 103-115.

Willis, P. (1977). Learning to labor. New York: Columbia University Press.

EFFECTIVENESS, COST, AND COST-EFFECTIVENESS OF EDUCATION TO ACHIEVE HEALTH GOALS

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ABSTRACT. This investigation provided an empirical test of educational concepts and theories applied to health goals and demonstrated the application of an economic analysis in a specific adult education context.

The investigation examined the contribution of specific education design strategies used to assist patients in achieving the goal of cholesterol reduction and the resource commitments associated with education and its effects. Of specific education design strategies examined, significant associations with the effectiveness measure were found for specific (vs. general) learning objectives, individualized (vs. standard) printed education materials, simple (vs. complex) subject matter, and doing an assessment and reporting the results (vs. not doing so). Education design strategies with greatest cost--physician reinforcement and number of education visits--were not found to be associated with effectiveness.

Educated patients achieved a statistically significant and clinically meaningful reduction in cholesterol, however multiple linear regression controlling for other variables, failed to attribute effectiveness to any specific education design strategy.

The total cost of education delivered to 132 adults was $13,829. Per patient costs varied fourfold depending on the combination of education design strategies used with each individual. Because differential effects attributable to specific education strategies were not found, the appropriate interpretation from an economic perspective is that, for education of patients with elevated cholesterol, educational design strategies can be selected to minimize costs without impacting effectiveness.

INTRODUCTION

Adult educators in many settings are challenged to show that their programs pay off by producing desired changes in learners, and that program goals are accomplished within a reasonable expenditure of resources. This is especially true in health care settings where resources are limited and health educators are charged with enabling learners/patients to make lifestyle changes that reduce their risk of disease.

It is assumed that adult educators can influence the outcome of educational efforts by designing programs and selecting specific strategies which maximize the achievement of desired goals (Green, 1979; Houle, 1972; Knowles, 1980). However little empirical evidence is available to relate specific strategies with program effectiveness in varying situations (Long, 1980). Further, few researchers have reported the costs associated with various strategies selected by adult educators and few studies of the cost-effectiveness of adult education programs have been reported.

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This research addressed the above issues through a study carried out in outpatient health care clinics where adults received education for the purpose of reducing elevated blood cholesterol and thereby preventing the sequela of coronary heart disease.

The study contributes to the field of adult education by providing an empirical test of various educational design strategies believed to be associated with achievement of educational outcomes and by demonstrating the application of cost-effectiveness analysis to adult education.

METHODOLOGY

RESEARCH QUESTIONS

The research was designed to assess the effectiveness, cost, and cost-effectiveness of education directed to health goals for adults in clinical settings. The portion of the study reported in this paper focuses on specific elements of an educational intervention and addresses three research questions. 1) Do specific education design strategies independently contribute to effectiveness? 2) What are the monetary costs associated with each education design strategy? 3) What is the relative cost-effectiveness of education design strategies used by educators in clinical settings?

A series of hypotheses were created to test the relationship between education design strategies and the effectiveness measure--cholesterol reduction. This provided an empirical test of educational concepts and theories and served as the effectiveness analysis of adult education in a defined educational application.

EDUCATION DESIGN STRATEGIES

Education design strategies were defined as elements of program design that are under the control of the educator and are purposefully selected to influence the outcomes of the
educational program. Education design strategies were derived from the literature based on three criteria: 1) ability to be controlled by the educator, 2) theoretical or empirical justification for their association with behavioral change, and 3) relevance to the health care setting.

The education design strategies studied included: scheduling factors (number of educational episodes, amount of instructional time, and duration of period for effect), nature of learning objectives (specific vs. general), instructional format (group vs. individual), printed education materials (number of handouts, individualized materials, and complexity of subject matter), reinforcement by an influential expert--physician (referral, discussion, specific directives), and learner self-monitoring of behaviors.

The cost and cost-effectiveness analyses in this investigation demonstrated the application of economic assessment methodology to adult education programs and provided a test of the economic efficiency of specific education design strategies used within education directed to adults who were at risk of coronary heart disease.

METHODS

The effectiveness of each education design strategy was determined using a quasi-experimental, nonequivalent control group design. Effectiveness was measured in terms of blood cholesterol reduction with success defined as a decline of more than 6 percent.

The nonprobability sample included 132 adults with elevated cholesterol levels. The sample was drawn from three states and represents health care clinics where education for elevated cholesterol was available from registered dietitians in 1987.

Data to determine education design strategy exposure and cholesterol reduction were abstracted from medical records using a standardized audit form. Costs were estimated using market values for personnel and materials.

Statistical analyses included Chi-square, t-tests, correlations, analyses of variance and covariance, and multiple linear regression. Control variables included nutrition assessment, other education, gender, presence of cardiovascular disease, and rural versus urban location.

The cost-effectiveness analysis was framed in a practical, decision making approach (Stoddart, 1982) and was carried out from the perspective of the organization (Levin, 1987). Costs were limited to direct costs for the educational program.

FINDINGS

The sample was 64 percent male and had a mean age of 53 (SD±12.5) years. Subjects had a mean of 2.5 educational episodes (range 1-13) with a registered dietitian during the study period. Cholesterol decline for the total sample was statistically significant (p=.000) and achieved standards for a clinically meaningful change (a 33.8 mg/dl cholesterol reduction or a 11.8 % change from the initial mean of 272 mg/dl).

EFFECTIVENESS

Education design strategies found in univariate analysis to be significantly associated with the dependent variable of cholesterol reduction ($p < .05$) were specific (vs. general) learning objectives, individualized (vs. standard) printed education materials, and simple (vs. complex) subject matter. A nutrition care variable, doing a nutrition assessment and reporting results, also had a significant association with cholesterol reduction. However, significant effects evident in univariate analysis lost significance when entered into multiple linear regression adjusting for subject characteristics (initial cholesterol, gender, and age) presence of other education, and location (rural versus urban).

Education design strategies which contribute to added costs--physician reinforcement and number of education episodes--were not found to be associated with successful cholesterol reduction.

COSTS

The total cost of education delivered 132 adults in the study who were at risk of coronary heart disease was $13,829, averaging $105 per client.

Unit costs for specific strategies ranged from no cost for general or specific objectives, to $5 for individualized education materials, to $6.38 for physician reinforcement, to $50 for a 60 minute educational episode with the registered dietitian. Costs for various combinations of education design strategies were estimated using variations commonly delivered in the study settings. Per patient costs for the study year ranged from $56 to $209 depending on the combination of education design strategies used.

Table 1. Cost-Effectiveness Ratios for Nutrition Education Based on Common Combinations of Educational Design Strategies

	Education Alternatives					
	Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6
Costs						
Education Costs (per patient)	$56.36	$111.63	$126.38	$151.00	$209.12	$107.54
Effects						
Cholesterol Reduction (mg/dL)						
Observed[1]				33.8		
Adjusted[2]				14.6		
Predicted[3] (prevention)	44.97	12.41	44.49	41.38	40.55	41.07
(treatment)	28.39	(+4.17)	27.91	24.80	23.97	24.49
Cholesterol Change (% of initial cholesterol)						
Observed[1]				11.8		
Adjusted[2]				6.3		
Predicted[3] (prevention)	17.16	4.81	17.80	20.26	15.22	15.45
(treatment)	10.97	(+1.39)	11.58	14.04	9.00	9.23
Cost-Effectiveness Ratios ($/1% change)						
Cost/Observed 1% Change	4.76	9.46	10.71	12.80	17.72	9.11
Cost/Adjusted 1% Change	8.95	17.72	20.06	23.97	33.19	17.07
Cost/Predicted 1% Change (prevention)	3.28	23.21	7.10	7.45	13.74	6.96
(treatment)	5.15	--	10.91	10.75	23.24	11.65

[1]Observed values are raw, unadjusted cholesterol reduction and percent change from initial cholesterol.

[2]Adjusted values are the slope coefficients for cholesterol reduction and percent change derived from a multiple linear regression which controlled for subject characteristics, other care variables, and amount of cholesterol change experienced by a no-intervention group.

[3]Predicted values are estimates calculated from slope coefficients from the multiple linear regression of education design strategies and other variables for a 53-year-old male receiving care in urban setting. Prevention indicates predicated values for individual with values for individual with no diagonsis of cardiovascular disease. Treatment indicates values for individual with diagnosed cardiovascular disease.

COST-EFFECTIVENESS

The cost-effectiveness analysis relates costs to effects. In this study a cost-effectiveness ratio expressed as dollars per one percent of cholesterol change was used to compare the economic efficiency of various combinations of education design strategies. The table summarizes the cost and effectiveness results and presents cost-effectiveness ratios for commonly available combinations of education design strategies.

CONCLUSION

Because there were no differential effects for specified strategies evidenced from the regression analysis, it can be concluded, from an economic perspective, that the lowest cost alternative is preferred. Based on the results of this study, one episode of education using specific objectives and well chosen, individualized educational materials covering simple subject material will minimize costs and may enhance effectiveness.

LITERATURE CITED

Green, L.W. (1979). Educational strategies to improve compliance with therapeutic and preventive regimens: The recent evidence. In R.B. Haynes, D.W. Taylor, & D.L. Sackett (Eds.) Compliance in Health Care. Baltimore: Johns Hopkins University Press.

Houle, C.O. (1972). The Design of Education. San Francisco: Jossey Bass.

Knowles, M.S. (1980). The Modern Practice of Adult Education (Revised). New York: Cambridge.

Levin, H.M. (1987). Cost-benefit and cost-effectiveness analysis. In D.S. Cordray, H.S. Bloom, & R.J. Light (Eds.), Evaluation Practice in Review. New Directions for Program Evaluation: No. 34 (pp. 83-99). San Francisco: Jossey-Bass.

Long, H.B. (1980). A perspective on adult education research. In H.B. Long, R. Hienstra, & Associates (Eds.), Changing Approaches to Studying Adult Education (pp. 1-21). San Francisco: Jossey-Bass.

Stoddard, G.L. (1982). Economic evaluation methods and health policy. Evaluation and the Health Professions, 5 (4), 393-414.

CORRELATING THE HIGH SCHOOL TESTS OF GENERAL EDUCATION DEVELOPMENT AND THE OFFICIAL GED PRACTICE TEST

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ABSTRACT. How closely will scores of new Army recruits on the Official GED Practice Test correlate with their scores on the High School Tests of General Education Development (GED)? This study addresses relationships between the Practice Tests and the 1988 GED edition. Research findings verify the usefulness of the pretest and raise topics for further research.

Soldiers must pretest on the Official GED Practice Test before GED testing and achieve 45 on each of the five parts with a 225 total to take the GED test. The pretest was administered to ninety-seven non high school graduate recruits, of whom forty with the required scores and ten others re-evaluated by counselors were given the GED test. Pretest and GED partial and total scores of both groups were tabulated, and means, standard deviations and coefficients of correlation computed for all parts and for total scores on both tests. Pretest and GED test scores for the two groups were plotted on scattergrams.

High positive correlations were found between pretest and GED test scores in all areas for soldiers with passing pretest scores. Correlation between the pretest and the GED for the ten soldiers failing the pretest was -0.170. Five of these passed the GED. Pretest scores for those not passing were between 219 and 224, and their GED test scores ranged from 211 to 220.

INTRODUCTION

The U.S. Army used selective recruiting in the 1980s to raise the quality of new soldiers. Ninety-five percent of recruits in 1987 had either a high school diploma or equivalency certificate based on the High School Test of General Educational Development (Ellis, 1987). Those few recruits without high school diplomas have an opportunity to earn a GED credential during Initial Entry Training (IET) (Crosby, 1988). The Department of Defense (DOD) requires pretesting on the Official GED Practice Test before taking the GED (DANTES, 1988). Examinees must have at least 45 on each of the five parts and a total of 225 to take the GED.

The Official GED Practice Tests are designed to help prospective examinees evaluate their readiness to take the GED. The pretest parts contain a representative sample of questions on the actual battery and give prospective examinees an indication of the types of questions on the actual GED. The Official GED Practice Tests and the Official GED Test were administered to a national sample of 1986 graduating high school seniors. Correlations between the pretest and the GED for each of the five parts of the battery ranged from 0.66 to 0.81 for one form of the test, and from 0.67 to 0.84 for an alternate form (GED Testing Service, 1987).

The pretest and GED require a total of twelve hours of testing time. Military commanders demanded waiver of the pretest and GED testing of all non high school graduate trainees. These officers claimed that the pretest wastes four hours of training time, and would not reliably predict GED scores. Since the

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Army pays for each soldier GED tested, high numbers of failures and retests would be expensive. Army Education records show that fewer than half of pretested trainees attain scores of 225 or higher.

A study was conducted to evaluate the usefulness of the pretest. The problem was to judge how well the Official GED Practice Test predicted success in the GED for soldiers at Fort Leonard Wood, Missouri. The hypothesis was that a positive correlation would be found between pretest and GED test scores. Although the cost for each soldier is small, total funds spent for GED testing are significant. Had the results not supported the hypothesis, the cost of GED testing all non high school graduate trainees would be justified as a means to reduce use of training time.

PROCEDURE

Ninety-seven non-high school graduates in a recruit brigade were given the Official GED Practice Test, administered and proctored by training sergeants. Forty soldiers who met requirements were scheduled for the GED. Education specialists re-evaluated ten soldiers and allowed them to take the GED test, although it was assumed that many of these would not pass.

Trainee pretest and GED scores were recorded by subject areas and by totals. Means and standard deviations of separate portions of the pretest and GED and on total scores were computed. A total of fifty trainees completed both the pretest and GED battery
during the study. Separate correlations of GED test scores of those who scored above and below 225 on the pretest were computed and tallied for each subject area, and for total scores.

Correlations between pretest and GED scores on each portion of the battery and on the total scores attained on each instrument by every examinee were computed. Correlations between scores on the subtests of both the pretest and the GED, and between the total scores on both instruments by each trainee, were examined.

RESULTS

The group of fifty trainees completing both batteries had total pretest scores ranging from 207 to 306, with a mean of 241 and a standard deviation of 18. GED results for this group ranged from 193 to 305, with a mean of 240 and a standard deviation of 22.

English pretest scores of the group of fifty trainees had a mean of 46, with a 5 standard deviation, and English GED had a 45 mean with a 5 standard deviation. Social Studies pretest scores had a 49 mean and a 5 standard deviation, and the Social Studies GED had a 48 mean and standard deviation of 6. The Science pretest had a 50 mean, and a 6 standard deviation, while the GED Science portion had a 51 mean with a 7 standard deviation. The reading pretest had a 47 mean with a 7 standard deviation, and the Reading GED had a 48 mean with a 5 standard deviation. The math pretest had a 48 mean and a 6 standard deviation, while the Math GED had a 47 mean and a 5 standard deviation.

The forty trainees who passed the pretest had scores that ranged from 225 to 306, with a mean of 246 and a standard deviation of 17. GED Test results for this subgroup ranged from 193 to 305, with a mean of 243 and a standard deviation of 23.

English pretest scores of the subgroup of forty trainees had a mean of 47 with a standard deviation of 5, while the English GED scores had a mean of 46 with a standard deviation of 5. The Social Studies pretest had a mean of 50 and a standard deviation of 4, while the Social Studies GED had a mean of 50 and standard deviation of 6. The Science pretest mean was 52, and the standard deviation was 6, while the

GED Science portion had a mean of 52 with a standard deviation of 8. Reading pretest scores had a mean of 49 with a standard deviation of 6, and Reading GED scores had a mean of 49 with a standard deviation of 6. Math pretest scores had a mean of 49 and a standard deviation of 6, while the Math GED scores had a mean of 48 and a standard deviation of 5.

The ten trainees not passing the pretest but taking the GED test had total pretest scores ranging from 207 to 224, with a mean of 220 and a standard deviation of 5. Their GED scores ranged from 211 to 238, with a mean of 226 and a standard deviation of 9.

English pretest scores of the subgroup of ten trainees had a mean of 45 with a standard deviation of 3, while English GED scores had a mean of 43 and a standard deviation of 4. Social Studies pretest scores had a mean of 45 and standard deviation of 3, while the Social Studies GED had a mean of 43 with a standard deviation of 4. The Science pretest mean was 46, with a standard deviation of 4, while the GED Science portion had a mean of 47 and a standard deviation of 4. Reading pretest scores had a mean of 41 with a standard deviation of 5, and the Reading portion of the GED had a mean of 47 with a standard deviation of 2. The Math pretest had a mean of 44 and a standard deviation of 5, and the Math GED had a mean of 46 and a standard deviation of 5.

Pretest and GED scores correlated positively in all subject areas and in the totals for the group of fifty soldiers who took the GED Test. The highest correlation was found between the English pretest and GED parts, with an r of 0.577. The lowest correlation was found between the reading portions, which yielded an r of 0.249. The results are summarized in Table 1 below.

Table 1

Correlations Between Pretest and GED Parts and Totals, with Means and Standard Deviations of Test Scores

TEST PART	PRETEST M	PRETEST ST DEV	GED TEST M	GED TEST ST DEV	PRE-POST r (PARTS)	PRE-POST r (TOTALS)
ENGLISH	46	5	45	5	0.58	0.62
SOCIAL	49	5	48	6	0.45	0.46
SCIENCE	50	6	51	7	0.53	0.58
READING	47	7	48	5	0.25	0.34
MATH	48	6	47	5	0.57	0.46
TOTALS	241	18	240	22	0.74	N/A

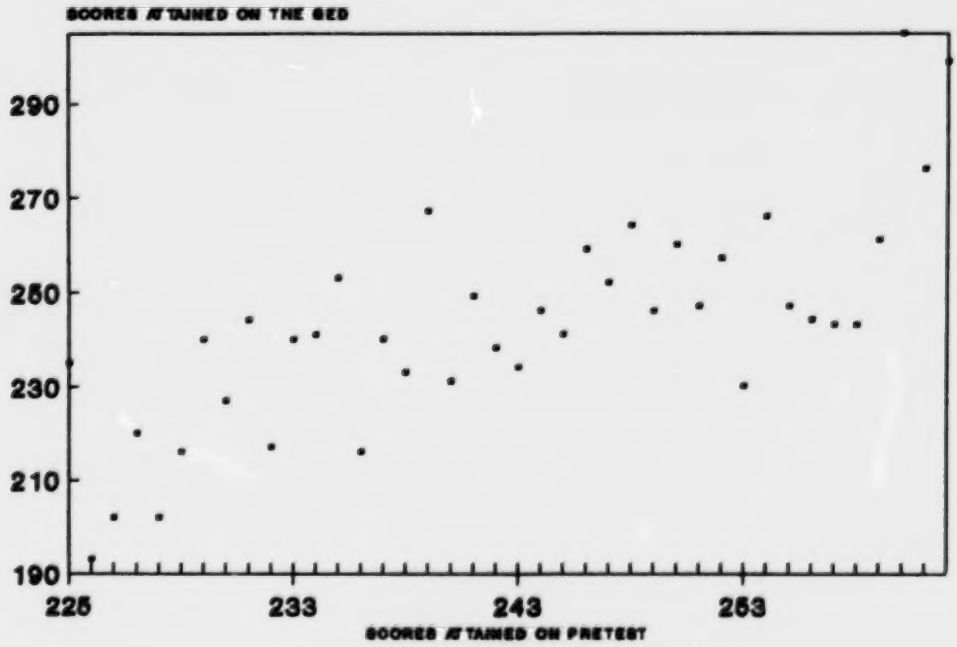

Figure 1
Pretest and GED Test Scores of Soldiers Attaining 226 or Better on Pretest

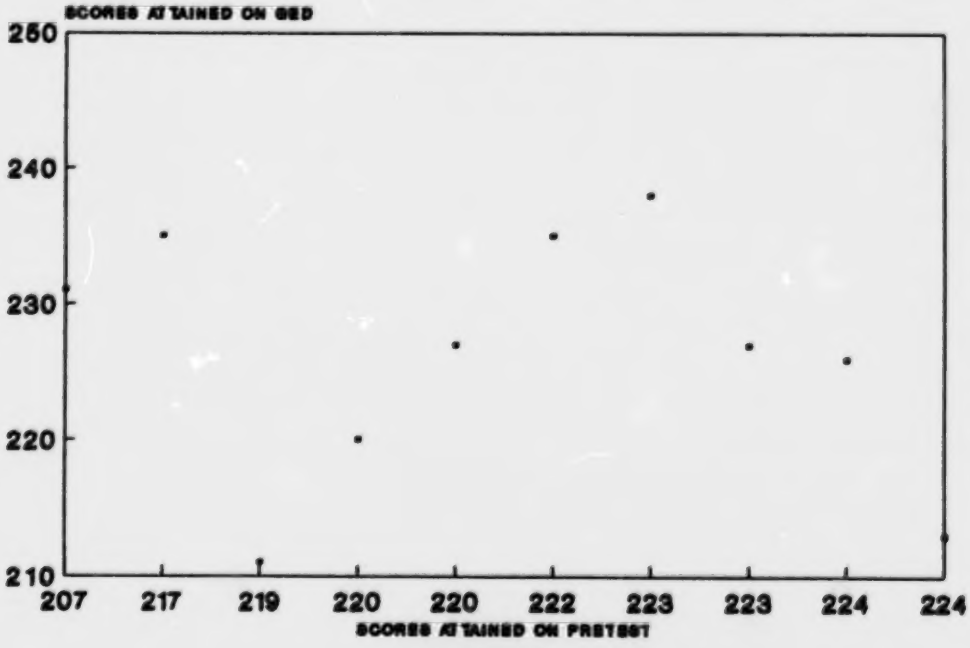

Figure 2
Pretest and GED Test Scores of Soldiers Not Attaining 226 on Pretest

The fifty soldiers completing both tests had total pretest and GED scores correlating at 0.738, while the correlation between tests for the forty passing the pretest was 0.742. A scattergram of these scores is in Figure 1, on the next page. Thirty-three of the subgroup qualified for certificates of equivalency, while seven did not pass. The pretest scores of soldiers not passing the GED were between 226 and 237, while their GED test scores ranged from 193 to 220.

Correlation between the pretest and the GED for the ten soldiers who did not pass the pretest but who took the GED was slightly negative, at -0.170. A scattergram of these scores is in Figure 2, on the next page. Five examinees passed the GED test. The pretest scores for those not passing the GED were between 219 and 224, while their GED test scores ranged from 211 to 220.

DISCUSSION, IMPLICATIONS, AND RECOMMENDATIONS

Lifestyles of Army recruits can generate substantial mental and physical stress. Trainees survive on very few hours of sleep, enduring rigorous discipline and strenuous physical training. Ten percent wash out because of physical limitations, personal or family problems, and psychological instability. Some trainees told counselors they were too tired to think during testing. Stressful conditions could have skewed test results, and fatigue could have affected the performance of an individual soldier.

Pretest conditions may have skewed results. To reduce trainee testing time, sergeants gave the pretests in military unit areas, eliminating the need to transport trainees between the unit and the education center. Since pretesting was not supervised by the Education Center, less than rigorous proctoring and misleading pretest scores may have resulted. The GED is administered under the rigid security and strict testing conditions of the Missouri State Department of Education. Sergeants supervising the pretest may not have proctored vigilantly, and so it is impossible to rule out the probability of inflated pretest scores.

Commanders were briefed on study results and reminded of the need for careful pretest proctoring. Based on the high positive correlations between the pretest and the GED found in the study, the recommendation was to continue pretesting military non high school graduates prior to administration of the GED.

Although the study subjects were soldiers, the results can be applied to civilians who have not completed high school. Results of the study are used to counsel civilian GED candidates to encourage use of the pretest, which is optional for civilians. Counselors use pretest scores to help identify strengths and to target areas that need remediation. Civilians and military personnel who are out of training have access to computer based instruction and other study materials to remedy deficiencies.

Research should be conducted on the effect of allotment of time for remediation of recruit weaknesses identified by the pretest. Additional research is needed to determine the effect on results of administration of the GED in two or more sessions rather than one full day of testing. Research into the relative advantage to soldiers of permitting all applicants to take the GED regardless of pretest scores should also be conducted.

LITERATURE CITED

Crosby, John S. "U.S. Army Training and Doctrine Command (TRADOC) Training Base GED Action Plan." Training and Doctrine Command Policy Letter, January 25, 1988.

Department of Defense. Directive 1322.8-H, Defense Activity for Non-Traditional Education Services (DANTES). January, 1988.

Ellis, Louise. "Educational Levels and Trends." An Information Paper for the Department of Defense. October 1, 1987.

GED Testing Service. Teacher's Manual for the Official Practice Tests. Englewood Cliffs, N.J.: Prentice-Hall, 1987.

EDUCATIONAL ORIENTATION AND JOB SATISFACTION: A STUDY OF EXTENSION AGENTS AND THEIR SUPERVISORS

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ABSTRACT: This study investigates the educational orientation held by Extension agents and the relationship between their educational orientation and their level of satisfaction in extension work. The Extension agents and their immediate supervisor in Michigan were requested to supply attitudinal responses and information through a mail questionnaire. Findings showed that Extension agents hold a moderate to strong orientation toward andragogy and pedagogy. The andragogical orientation was found relatively stronger than the pedagogical orientation. Extension agents were well satisfied with the content and context of their jobs. The andragogy score of Extension agents was positively related to their job satisfaction but no relationship was observed between pedagogy score and job satisfaction. The findings showed no significant differences on the level of job satisfaction between agents whose educational orientations were similar to their immediate supervisors and those who had educational orientations different from their immediate supervisors.

INTRODUCTION

The Cooperative Extension Service (CES) offers non-formal education programs to a diverse set of clients who are mainly adults. The extent to which the CES accomplishes its goals is ultimately derived from its individual staff members, mainly the field level agents who are the cutting edge of the organization. Studies have indicated that agents' perceptions of the professional commitment vis-a-vis productivity is closely related to their level of job satisfaction (Kemp, 1967; Terpstra, 1979). Studies have indicated that agents' performance is related to their level of job satisfaction (Van-Tilburg, 1987; Keffer and Cunningham, 1977; Henderson, 1970).

Improving the level of job satisfaction and motivation of Extension agents has been the continuing objective of Extension. In order to be a successful educator of adults, the agents need to possess a set of orientations about working educationally with the adults. Contemporary theories of adult learning suggest that adult learners are increasingly self-directed and independent; they are goal-oriented, activity-oriented, and their learning is active, problem-centered and oriented toward immediate application (Levine, 1990; Brookfield, 1985; Knowles, 1980). Knowles (1980) advocates that andragogy, not pedagogy, is an appropriate model for helping adults learn. He defines andragogy as "the body of theory and practice on which self-directed learning is based", whereas, pedagogy is "the body of theory and practice on which teacher-directed learning is based" (p.390).

Currently, no studies have reported the job satisfaction of Extension agents as it relates to their educational orientations. Extension educators have little empirical evidence to base their recommendations as to what philosophical orientation, andragogy or pedagogy, is appropriate for the Extension agent role.

PURPOSE: The primary purpose of the study was to investigate the educational orientations held by Extension agents and the relationship between their educational orientation and their level of job satisfaction.

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RESEARCH QUESTIONS

The study was organized around a set of five inter-related research questions. The research questions were:

1. What educational orientations do Cooperative Extension Service agents and their immediate supervisors hold?

2. Is there a relationship between an agent's personal characteristics and his/her educational orientation?

3. What is the level of job satisfaction of Cooperative Extension Service agents?

4. Is there a relationship between an agent's educational orientation and their job satisfaction?

5. Are extension agents who have educational orientations that are similar to their immediate supervisor more satisfied with their job than agents who have educational orientations different from their immediate supervisor?

METHODS AND PROCEDURES

The population for this study was Cooperative Extension Service (CES) field agents in Michigan. A total of 153 Extension agents and 79 County Extension Directors (CEDs) with at least one year of work experience were identified for this study.

The data collection instrument was a self-administered mailed questionnaire. The instrument was adapted for use in this study by combining two previously validated instruments. One was designed to measure educational orientation of adult educators as it relates to andragogy and pedagogy (Hadley, 1975) and the other was designed to measure job satisfaction of Cooperative Extension Service personnel (Cassina, 1989; Kesler, 1989). A panel of experts examined the adapted instruments to ascertain their content validity. These instruments were pilot tested for reliability and Cronbach's alpha was determined at 0.72, 0.73, and 0.94 for scales pertaining to andragogy, pedagogy and job satisfaction, respectively.

The questionnaires were mailed to the identified populations in September, 1990. A follow-up postcard reminding the respondents to complete and return the questionnaire was sent to non-respondents two weeks after the first mailing. The study had a final response rate of 73.2 and 81.0 percent for the Extension agents and the CEDs, respectively. A comparison of early respondents with late respondents on selected variables indicated no significant difference. This procedure allowed for the generalization of the results for the survey population (Miller and Smith, 1983).

Statistical techniques such as frequencies, ranges, percentages, means, standard deviations, correlations, t-test, and analysis of variance were used to analyze data. The SPCC/PC+ computer program was used to analyze data.

FINDINGS

The andragogical orientation score for the Extension agents ranged from 2.67 to 4.75 with a mean of 3.71 and a standard deviation of 0.41 (see Table 1). Of the Extension agents, 61.6 percent were found to possess a strong andragogical orientation and had an andragogy score of 3.5 or higher whereas none scored less than 2.5 on a 1-5 scale. The andragogical orientation score for the CEDs ranged from 3.0 to

4.75 with a mean of 3.82 and a standard deviation of 0.40. Of the CEDs, 74.6 percent were found to possess a strong andragogical orientation and had an andragogy score of 3.5 or higher, 25.4 percent had an score between 2.5 and 3.5 and none scored less than 2.5 on a 1-5 scale. In general, the CEDs' had a stronger andragogical orientation than that of the agents.

Table 1. Andragogical orientation score of the respondents

Level of andragogical orientation score	Range of scores	Agents No. (%)	CEDs No. (%)
Low	< 2.5	0 (0)	0 (0)
Moderate	2.5 - 3.5	43 (38.4)	16 (25.4)
Strong	> 3.5	69 (61.6)	47 (74.6)
	Total	112 (100)	64 (100)

Mean for Agents = 3.71, S.D. = 0.41
Mean for CEDs = 3.82, S.D. = 0.40

The pedagogical orientation score for the Extension agents ranged from 1.83 to 4.33, with a mean of 3.19 and a standard deviation of 0.51. On the other hand, the mean pedagogical score for the CEDs ranged from 2.16 to 4.33 with a mean of 3.14 and a standard deviation of 0.46. Analysis of the pedagogical orientation score showed that 12.5 percent of the Extension agents and 11.1 percent of the CEDs had a low pedagogy score, a score of less than 2.5 on a 1-5 scale (see Table 2). A moderate pedagogy score was noted among 63.4 percent of the agents and 69.8 percent of the CEDs. A strong pedagogical orientation score, a score above 3.5 on a 1-5 scale, was found among 24.1 percent of the agents and 19.1 percent of the CEDs.

Table 2. Pedagogical orientation score of respondents

Level of pedagogical orientation	Range of scores	Agents Number (%)	CEDs Number (%)
Low	< 2.5	14 (12.5)	7 (11.1)
Moderate	2.5-3.5	71 (63.4)	44 (69.8)
Strong	> 3.5	27 (24.1)	12 (19.1)
	Total	112 (100)	63 (100)

Mean for Agents = 3.19, S.D. = 0.51
Mean for CEDs = 3.14, S.D. = 0.46

The relationship between an agent's personal characteristics and his/her educational orientation was explored. Findings showed no significant linear relationship between demographic characteristics like age, experience in current position and the total Extension experience and educational orientations. T-tests were performed to see if agents have different educational orientations when examined in relation to their

sex, marital status, single or multi-county assignments, having a graduate degree, and prior experience as a school teacher. Findings showed that married agents had different andragogy scores than their single counterparts with the former group being less andragogical than the latter. No differences were observed between other dichotomous characteristics and andragogy scores.

Results of the t-test showed that male agents were different from their female counterparts in terms of pedagogy scores. The male extension agents were found to possess a stronger pedagogical orientation than female agents. No significant differences were observed between other dichotomous demographic characteristics and pedagogy scores.

One-way analysis of variance and Scheffe procedures were used to examine differences in educational orientations in terms of program area affiliation. Significant differences at the 0.05 level were observed among Extension agents under different program areas in terms of andragogical orientation. Results of the Scheffe post-hoc test showed that the andragogical orientations of the Agricultural and Marketing and the Home Economics agents were significantly different from 4-H Youth agents with the former groups being less andragogical than the latter.

Do respondents with a high or low andragogical orientation score hold a different level of pedagogical orientation and vice-versa? T-tests were performed to answer these questions. Respondents whose andragogical orientation score was higher than plus one standard deviation value from the mean andragogy score were classified as "high andragogy" and those scoring less than one standard deviation value from the mean were classified as "low andragogy" group. Similar procedures were applied to classify "high pedagogy" and "low pedagogy" groups. Findings showed that Extension agents belonging to the "high andragogy" group were significantly different from the "low andragogy" group with respect to their pedagogical orientation scores. The "high andragogy" group had a lower pedagogy score and vice-versa (see Table 3). Extension agents with "low pedagogy" scores were not significantly different from the "high pedagogy" group in terms of andragogical scores (see Table 4).

Table 3. T-test analyzing pedagogy score with high and low level of andragogy scores

Group	(n)	Mean Pedagogy score	t-value	Prob.
High andragogy	(19)	2.86		
			2.94	.00
Low andragogy	(22)	3.29		

Table 4. T-test analyzing andragogy score with high and low level of pedagogy scores

Group	(n)	Mean andragogy score	t-value	Prob.
High pedagogy	(21)	3.67		
			1.66	.10
Low pedagogy	(21)	3.88		

An attempt was also made to study whether an Extension agent could hold both andragogical and pedagogical orientations simultaneously at the higher or the lower level. For this purpose, agents whose scores were above and below the mean andragogy score were categorized as high andragogy and low andragogy, respectively. Similarly, agents scoring above and below the mean pedagogical score were categorized as high and low pedagogical orientation, respectively. A combination of the two high-low andragogical-pedagogical orientation categories resulted in a matrix of four types of educational orientations. Findings showed that it is possible for an Extension agent to hold a combination of strong dual orientation, strong andragogical orientation, strong pedagogical orientation or weak dual orientation. This indicated that andragogy and pedagogy could exist simultaneously and an agent may hold both orientations at high or low levels (see Table 5). It could be possible that andragogy and pedagogy are not merely two extremes on a single continuum but instead these are two separate phenomena that can be measured separately.

Table 5. Distribution of Extension agents in a matrix of educational orientation

Educational Orientation	Number	(%)
Weak dual orientation	26	23.9
Strong pedagogical orientation	41	37.6
Strong andragogical orientation	23	21.1
Strong dual orientation	19	17.4
Total	109	100

The third research question was to ascertain the level of job satisfaction of Extension agents. The agents were surveyed on their attitude toward their job by using an instrument designed to assess job satisfaction. The overall job satisfaction score ranged from 2.26 to 4.31 with a mean of 3.57 and a standard deviation of 0.50 (see Table 6). Findings showed that Extension agents were well satisfied with the content and context of their jobs. Of the 40 job satisfaction items, 9 items had a mean score of 4.0 or higher, on a 1 to 5 scale, indicating a higher level of job satisfaction, whereas seven items were rated below 3.0, i.e., below the "ACCEPTABLE" level of job satisfaction. The items with higher scores were related to agents' relationships with their clientele, freedom to choose their own methods, the Extension work itself, interpersonal relations, and opportunity for creativity in the job. The items with low scores were related to the opportunity to advance in the organization, the amount of time and work necessary to do the job, the organization's internal communication, adequacy of performance evaluation, and salary progress and salary compared to those in similar fields of work.

Table 6. Distribution of Extension agents' job satisfaction score

Level of job Satisfaction	Range of scores	Number(%)
Low	< 2.5	0 (0)
Moderate	2.5 - 3.5	55 (49.5)
High	> 3.5	56 (50.5)
	Total	111 (100)

Mean job satisfaction score = 3.57; S.D. = 0.50

The fourth research question of this study aimed at finding out the relationship between an Extension agent's educational orientation and his/her job satisfaction. Correlation coefficient indicated a low positive relationship between andragogy scores and job satisfaction scores (see Table 7). The pedagogical score showed no relationship with an agents' overall job satisfaction.

Table 7. Relationship between educational orientation and job satisfaction

Relationship	Correlation (r value)
Andragogy and job satisfaction	.30
Pedagogy and job satisfaction	.04

The final research question of the study attempted to find out whether Extension agents who have educational orientations which are similar to their immediate supervisor are more satisfied with their job than agents who have educational orientations different from their immediate supervisor. Andragogical congruence scores ranged from -1.91 to 1.25. The pedagogical congruence score ranged from -1.75 to 1.67. Extension agents belonging to the first and last quartiles of the andragogical and pedagogical congruence scores were classified as "incongruent" and the rest were classified as "congruent". The t-test was used to determine the differences in the level of job satisfaction between the "congruent" and "incongruent" groups. Findings showed that the level of job satisfaction of Extension agents whose andragogical orientation scores was "congruent" with their immediate supervisor was not significantly different from agents who were "incongruent" with their supervisors' andragogical score (see Table 8).

Table 8. T-test analyzing job satisfaction as to congruence of andragogical and pedagogical scores

Group	(n)	Job satisfaction	t- value	Prob.
Andragogy score:				
Incongruent group	(45)	3.66	1.57	.12
Congruent group	(46)	3.50		
Pedagogy score:				
Incongruent group	(48)	3.55	.50	.62
Congruent group	(43)	3.60		

Similar procedures were followed to determine the differences in the level of job satisfaction between agents who were "congruent" and "incongruent" with respect to the pedagogical orientation of their immediate supervisors. Findings showed that Extension agents whose pedagogical orientation scores were congruent with their supervisor were not different from the incongruent group with respect to job satisfaction (see Table 8).

IMPLICATIONS

Recent studies in the CES setting have indicated that agents' performance is related to their level of job satisfaction. This study concludes that the Michigan CES agents possess a moderate andragogical and pedagogical orientation and that andragogical orientation is related to an agent's job satisfaction. Such a finding offers insights for those involved in managing extension programs. Since andragogy is considered to be an appropriate orientation for adult educators and as it was related to job satisfaction, the hiring practices of the CES could consider individuals who not only have expertise in technical subject matter content but also possess appropriate educational orientations. A series of in-service programs, regardless of an agent's position, education or experience in adult learning principles seems appropriate considering the professional growth needs of Extension agents. Short courses like "How to teach technical information to adults" could be especially beneficial. Such in-service programs could help to further strengthen the Extension agents' andragogical orientation vis-a-vis job satisfaction.

Findings indicated that andragogy and pedagogy could exist simultaneously and an Extension agent may hold both orientations at high or low levels. It could be possible that andragogy and pedagogy are not merely two extremes on a single continuum but instead are two separate phenomena that can be measured separately.

The findings of this study indicated that andragogy and pedagogy are two different orientations. Although pedagogy was not found to be related to an agent's job satisfaction, higher pedagogy scores associated with higher andragogy scores were indicative of a higher level of job satisfaction. Thompson (1989) is probably right to suggest that an andragogical instructional approach is a necessary but not sufficient model for adult educators to utilize. According to Thompson, an andragogical approach is effectively

complemented by the pedagogical instructional model and thus proposes a need for a complementary view of andragogy and pedagogy.

The congruence of educational orientation between pairs of Extension agent and their supervisor was not associated with the agent's job satisfaction. It could also be possible that CEDs really do not act as immediate supervisors, or agents consider them more like colleagues. It could also be possible that Extension agents do not have supervisors and hence the question of congruence may be naive in this context. Therefore the issue of congruence warrants further research in other contexts where there is clearly a "supervisor-subordinate" relationship among Extension educators.

Educational orientations are the attitudinal dimensions which are formed on the basis of reflections of prevailing values, beliefs, and practices of extension agents with respect to their role as educators of adults. These orientations could change over time depending on how well these orientations serve the agents, the amount of contact the agents have with others holding different orientations, and the range of opportunities the agents are presented with to question their current orientation or force them to actually modify their orientations. The CES organization should help Extension agents to develop and hold an appropriate educational orientation by demonstrating to agents using appropriate incentives that holding an appropriate educational orientation is a worthwhile goal.

LITERATURE CITED

Brookfield, S. D. 1986. Understanding and Facilitating Adult Learning. San Francisco: Jossey-Bass.

Cassina, E. H. 1989. "Levels of Job Satisfaction of Illinois Cooperative Extension Personnel." Thesis, Master of Science, Iowa State University, Ames.

Hadley, H. N. 1975. "Development of an Instrument to Determine Adult Educators Orientation: Andragogical or Pedagogical". Ph.D. Dissertation. Boston: Boston University School of Education.

Henderson, D. 1970. "A Study to Determine Why Missouri Extension Youth Agents Resign or Change to Another Position Within the Extension Division", (ERIC Document Reproduction Service No. ED 039497.

Keffer, W. M. and Cunningham, C. J. 1977. "Job Satisfaction of Field Staff of the Virginia Polytechnic Institute and State University Extension Division", Summary of Research. Columbus: Department of Agricultural Education, The Ohio State University.

Kemp, P. E. 1967. "Commitment and Job Satisfaction". Journal of Cooperative Extension, Fall.

Kesler, K. C. 1989. "Job Satisfaction and Perceived Inservice needs of Iowa Cooperative Extension Personnel" (Doctoral Dissertation, Iowa State University). Dissertation Abstracts International, Vol. 50, No. 6.

Knowles, M. S. 1980. The Modern Practice of Adult Education: From Pedagogy to Andragogy. Chicago: Follett Publishing company.

Levine, S. J. 1990. "Instructional Strategies", Local Learning Seminar. East Lansing: Department of Agricultural and Extension Education, Michigan State University.

Miller, L. E. and Smith, K. L. 1983. "Handling Nonresponse Issues", Journal of Extension, September/October.

Terpstra, D. E. 1979. "Theories of Motivation - Borrowing the Best," Personnel Journal, June.

Thompson, G. 1989. "The Complete Adult Educator: A Reconceptualization of Andragogy and Pedagogy". Canadian Journal of University Continuing Education, Vol. 15, No. 1, Spring.

Van-Tilburg, E. 1987. "Performance-Reward Contingencies: The role and Relationship of Perceived Equity in the Job Performance-Job Satisfaction Question", (ERIC Document Reproduction Service, No. ED 278868).

KNOWLEDGE STRUCTURES UNDERLYING REAL WORLD PRACTICE: IMPLICATIONS FOR ADULT EDUCATION

Ruth G. Thomas and Michelle Englund[1]

ABSTRACT. Much adult education is focused on helping adults improve their practice in some area of their work or life. This research concerned the nature of knowledge that guides people's practice and how this knowledge can be affected by education. The central question pursued was, "How can the development of practice-relevant knowledge be supported?" A prototype Level III computerized video disc learning environment in the area of supporting children's social development was created. Its design was based on cognitive theories of learning and knowledge, including a theory of knowledge levels and a theory of case-based learning. The beginning level of the prototype was evaluated for it effectiveness in enabling learners to focus selective, strategic attention on cues relevant to children's development and to identify deep-level, principle-based features of situations involving children. Sixteen diverse adult learners experienced the learning environment for 20 to 30 hours in small groups. Increases on pre- and post-assessments suggest that the learning environment was effective in facilitating beginning level learning and in setting the stage for intermediate level learning focused on goals and plans for supporting children's social development.

INTRODUCTION

New views of learning that are relevant to practice are emerging (Argyris, Putnam, & Smith, 1985; Scribner, 1984). These views see knowledge as constructed by the learner. People make sense of their environment by constructing meanings to which they attend. These meanings enable people to see things and events in certain ways and guide their actions. Individuals test and modify their meanings by monitoring their actions to learn if they are effective. Over time, adults develop a repertoire of such constructed meanings, a knowledge structure. Adults also learn programs for drawing from their knowledge structure in interpreting and creating actions for unique situations. In other words, they learn to compile their knowledge in different ways so it is applicable to different situations.

Research over the past 20 years in cognitive psychology has enabled deeper understanding of the nature of knowledge and of how knowledge and thinking interact to produce judgments and action plans for a situation or problem. One such theory, a theory of knowledge structures (Galambos, Abelson, & Black, 1986; Schank & Abelson, 1977), provided a theoretical context for the study. This theory was selected because of its relevance to real-world practice and because it focuses on interactions between knowledge and thinking and on how people interpret their environment and generate actions in it. This theory of scripts, plans, goals and themes acknowledges the messiness and frequent illogical character of the real world and holds that people understand and act in real world events based on a knowledge system

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consisting of varying types and levels. Central tenets in this theory are: (a) Knowledge domain specificity. Knowledge in one domain may be organized according to principles different from knowledge in another. A theory of cognition in a particular domain requires a theory of the domain itself, a description of the more complex structures in memory and their characteristic properties. (b) Schematized knowledge. Knowledge is organized in chunks or packages so that with one or more cues, many inferences are possible about what might happen in a given situation. (c) Multi-level knowledge structures. Knowledge is organized in multi-level structures which include large, abstract, over-arching thematic structures at the top, goal structures that are generated by the themes, and plans for action that are linked to the goals.

The area of practice selected for the study was supporting children's social development. This area was chosen because of its relevance to both professional practice (e.g., practitioners in early education) and to an area of daily life practice (parenting). In addition, it is an area involving complex judgments and one in which there is a considerable amount of formal knowledge available. Third, it is an area in which the need for alternatives to traditional, formal approaches to instruction has been established. Fourth, it is an area heavily influenced by adults' prior life experience and personal qualities. Because of this, adults need opportunities to discover their own personal qualities, the implications of those qualities for their work with children, and to sense for themselves their own possibilities and development needs. Such personal learning is unlikely to occur when education is limited to exposure to formal knowledge through traditional teaching methods which emphasize presentation of information. Finally, parent education is a growing area of adult education and promises to remain so in the foreseeable future.

Central questions that guided a program of research which encompassed the study reported here were: (a) What is the nature of knowledge underlying practice? (b) What is similar and different about knowledge underlying practice and other kinds of knowledge? (c) How can the development of practice-relevant knowledge be supported? Questions (a) and (b) were pursued in earlier work (Thomas & Englund, 1989). The research reported here focused on question (c).

METHODOLOGY

An instructional prototype based on the knowledge and learning theories described in the introduction and background sections was developed and tested. The prototype was comprised of an interactive, multi-media learning environment which included a level III video disc which was produced by the researchers specifically for the learning environment, a computer, and a touch screen monitor. This type of prototype was selected because of capabilities elaborated in the subsequent section.

DEVELOPMENT OF THE LEARNING ENVIRONMENT

The central learning goal addressed in the design of the learning environment was deepening and integrating students' knowledge about children, relationships between adults and children, and consequences of adult actions and patterns of thinking for children and for adult-child relationships. Three levels of learning were incorporated in the learning environment: (a) an introductory level focused on environments for children, child development concepts and principles, and children's activities; (b) an intermediate level focused on goals and actions of adults in working with children, and (c) an advanced level concerning adults' assumptions, beliefs, and themes in working with children and their implications for adults' goals and actions and for children's development. The learning environment was designed to reduce limitations and problems that accompany more traditional approaches to teaching adults by: (a) presenting situations in a format like that in which they are encountered in real life; (b) enabling adults to have greater control over their own learning process, to be self-directed learners; (c) supporting learners

in focusing their attention on relevant cues; (d) helping learners connect their knowledge with the real world; (e) broadening the range of action alternatives learners consider; (f) providing guidance and feedback to learners and asking them to reflect during and immediately after critical experiences; (g) helping learners become more conscious of their own personal qualities, and their own patterns of thinking and action regarding children.

Case-based learning (Spiro, R. J., Vispoel, W. P., Schmitz, J. G., Samarapungavan, A., & Boerger, A. E., 1987) was a central strategy in the design of the learning environment. A case is explored a number of times, each time from a different perspective or in relation to a different concept. This helps learners develop multiple perspectives and points of view regarding cases, contributes flexibility to their knowledge, and aids its transfer across widely different situations and contexts. Computer control of the video was used to strategically sequence and cluster the video-taped cases so that similarity and contrast would be easier to notice. The learning environment was designed to enable learners to control the frequency and pace of situation examination. In addition, unlike many interactive videodisc environments which present only expert models with the intent of showing learners a preferred or correct approach, cases included in this learning environment reflected a range of levels of expertise. This was to give learners opportunities to observe, analyze, compare, and evaluate the models as a basis for creating their own models and approaches. Mediation of learning was an important part of the case-based strategy. Mediation involves guiding learners through the thinking processes that are needed for constructing meaning and learning independently. The computer provided mediation by shifting learners' attention to different aspects of the same situation, highlighting features of cases, and provide conceptual lenses through which to view and interpret cases.

Special structures referred to as "buds" were included in the learning environment to enhance integration among knowledge levels. Buds set the stage for learning at the intermediate level by beginning an exploration of goals and plans (intermediate-level knowledge structures) relevant to the beginner level concept being explored.

EVALUATION OF THE LEARNING ENVIRONMENT

The beginning level of the learning environment was tested for its ability to enable learners to construct beginning level knowledge structures in the domain of supporting children's social development. The intermediate level of the learning environment had already been tested in an earlier study (Thomas & Englund, 1990); the advanced level was not yet ready for evaluation. It was intended that the evaluation would provide information about the effectiveness of the beginning level of the learning environment in deepening and integrating students' knowledge about children's development and diversity, about environments for children, and about activities in which children are involved.

Three methods of assessment were used in the evaluation of the beginning level of the learning environment. The first, a diagnostic assessment, was designed to indicate which level of the program was most appropriate for a given learner and to assess learners' development at the end of their experience with the learning environment. This assessment involved viewing three scenes on the video disc that were similar in their surface features but different in their deeper features. It was expected that individuals more advanced in their development in the knowledge domain would detect deeper features and see the scenes as less similar than individuals at a beginning level who were expected to focus their attention on surface features. This assessment was anticipated to be especially suited to measuring learning at the beginning level of the learning environment.

The second assessment approach, known as a Tailored Response Test (TRT), was designed to test application of knowledge in making judgments about actions of people in specific, domain-related

situations. The TRT contains nine video-taped vignettes and a written paragraph discussing each. Learners watch each vignette and then edit the paragraph by crossing out words, phrases, or sentences until the paragraph reflects their judgment about the situation. The TRT had been previously tested with learners enrolled in high school, technical colleges, associate degree programs, baccalaureate degree programs, and adult education. Internal consistency coefficients on the nine paragraphs ranged from .70 to .91. Concurrent validity data supporting the TRT's validity was also available (Thomas, 1988). The TRT was anticipated to be especially suited to measuring learning in the intermediate level of the learning environment.

A third assessment approach, identified as scenario analysis, was designed to reflect integration of knowledge. This assessment involved learners in watching a brief scene that was unfamiliar to them and writing an open-ended interpretation of the scene. Written scenario analyses were content-analyzed for linkages among types of knowledge structures they reflected (e.g., plans, goals, themes). A detailed coding scheme was developed for use in the content analysis. Links were scored according to a procedure developed by Novak and Gowin (1984). Sufficient experience with this procedure was not available to determine if it was more suited to reflecting learning at one level of the learning environment more than another.

Two formats in which learners could experience the learning environment were established, a twenty-hour, noncredit format, and a 30-hour credit or noncredit option. Both formats spanned approximately ten weeks. In order to test the learning environment with more culturally diverse individuals, one off-campus setting was arranged. Four individuals representing Native-American, African-American, and Mexican-American cultures experienced the learning environment in the off-campus location. All others experienced it on a university campus. Sixteen beginning level adult learners participated in the evaluation. All participants were volunteers and female. All were enrolled in an educational program of some type, which varied from adult evening extension programs to day programs in technical colleges and universities. Most participants were between 20 and 23 years of age, although ages ranged from 20 to 56. More than half had not completed any post-secondary education.

All three assessments were administered as pre-assessments during participants' initial session of instruction. Scores on the diagnostic assessment were used in determining each participant's placement within the learning environment in terms of appropriate learning level. Participants also received general information about the learning environment and procedures that would be followed, completed a demographic questionnaire, and were interviewed regarding their interests in the learning environment, their purpose in volunteering, their background knowledge and experience, and their schedule. Learners experienced the learning environment in groups of two to six people in weekly sessions which ranged in length from two to six hours. Reasons for using a group structure included the opportunities for deep processing and mediation of concepts and issues that discussion of them is likely to provide (deep processing occurs when more time is spent thinking about a concept and when the concept is linked to a range of other ideas). Participants were post-tested on all three assessments during their final session of participation.

FINDINGS

Pre- and post-assessment means were compared using the t-test for correlated data. Increases in pre- to post-means were found on all three assessments with the increases on the diagnostic assessment significant at the .005 level and those for the TRT significant at the .08 level. Increases on the scenario analysis means were not significant. Factors that may have been related to learning gains were investigated. These factors included the number of hours learners experienced the learning environment (20 versus 30 hour groups), the instructor (three different instructors taught beginning level groups), and location (on-campus

versus off-campus). No systematic differences were found in any of these comparisons on any of the learning assessment scores.

DISCUSSION AND CONCLUSIONS

Patterns in the diagnostic and TRT data suggest that knowledge structures became more complex over the course of experience with the learning environment, allowing adults to see more deeply into situations, and to more adequately apply practice-relevant knowledge in making judgments about specific situations. Increases from pre- to post-scores on the diagnostic assessment suggest that the beginning level of the learning environment was effective in enabling learners to focus selective, strategic attention on cues relevant to children's development and to identify deep-level, principle-based features of situations involving children. The efficacy of the principles on which the learning environment was based was also supported by this data. Increases in the TRT means are suggest that the bud structures were effective in setting the stage for intermediate level learning which focuses on linking knowledge of children to goals, plans, and actions. While both the diagnostic and TRT reflect varying degrees of integration of knowledge about features of the external world with goals, plans, and actions, the assessment most specifically focused on the development of integrated knowledge structures was the scenario analysis which showed no pre- to post increases. Possible reasons for this are that the beginning level of the learning environment does not support knowledge integration (he data on the TRT and the diagnostic conflict with this conclusion, however, since both of those also require a degree of knowledge integration), the open-ended character of the scenario analysis may make it susceptible to effects from external factors, and the complex content analysis procedure used to score the paragraphs may need further refining.

RECOMMENDATIONS

Implementation of the beginning level of the learning environment on a field test basis in various educational settings seems a reasonable next step. The data presented here suggest that the learning environment is adaptable to implementation in alternative settings, and that the learning environment can make a contribution to learning in different settings and populations. The "Supporting Children's Social Development" learning environment should be available to colleges and universities, technical schools, and adult in-service and continuing education programs whose audiences include individuals interested in learning more about working with and nurturing young children (e.g., early educators, day care personnel, parents, and staff trainers and those preparing for these roles). What it was about learners' experiences in the sessions that contributed to their learning should be investigated. All sessions with the learning environment were audio-taped. In addition, the computer automatically collected data regarding learners' paths through the learning environment. This data should be analyzed in relation to pre- and post-assessment score patterns. Finally, other designs for learning based on the principles underlying the design of the learning environment but in different areas of practice should be developed.

LITERATURE CITED

Argyris, C., Putnam, R., & Smith, D. (1985). Action science. San Francisco: Jossey-Bass.

Galambos, J. A., Abelson, R. P., & Black, J. B. (1986). Knowledge structures. Hillsdale, NJ: Lawrence Erlbaum.

Novak, J. D., & Gowin, D. B. (1984). Learning how to learn. Cambridge: Cambridge University.

Schank, R. C., & Abelson, R. P. (1977). Scripts, plans, goals and understanding: An inquiry into human knowledge structures. Hillsdale, NJ: Erlbaum.

Scribner, S. (1984). Studying working intelligence. In B. Rogoff, & J. Lave (Eds.), Everyday cognition: Its development in social context (pp. 9-40). Cambridge, MA: Harvard University.

Spiro, R. J., Vispoel, W. P., Schmitz, J. G., Samarapungavan, A., & Boerger, A. E. (1987). Knowledge acquisition for application: Cognitive flexibility and transfer in complex content domains (Tech. Rep. No. 409). Champaign: University of Illinois at Urbana-Champaign, Center for the Study of Reading.

Thomas, R. (1988). The tailored response test: An approach to assessing higher order thinking related to work roles and contexts. St. Paul: , University of Minnesota,Minnesota Research and Development Center for Vocational Education.

Thomas, R. G., & Englund, M. (1989). Instructional design for developing higher order thinking. Vol. 1: Knowledge domain development. St. Paul: University of Minnesota, Minnesota Research and Development Center for Vocational Education.

Thomas, R. G., & Englund, M. (1990). Instructional design for facilitating higher order thinking. Vol. II: Instructional design. St. Paul: University of Minnesota, Minnesota Research and Development Center for Vocational Education.

AN INVESTIGATION OF THE RELATIONSHIP BETWEEN SELF-DIRECTED LEARNING PROJECTS AND PROGRESS TOWARD INDIVIDUATION

John P. Wilson and Mary Elizabeth Knapp[1]

ABSTRACT. It was conjectured that self-directed learning projects can serve as vehicles for personal transformation in the form of Jung's concept of individuation. Individuation is the integration of all aspects of self, and involves movement toward a balance of separateness and connectedness within self and with others. Six episodes of individuation were combined with indicators of emotional interconnectedness to serve as a basis for analyzing outcomes of three women's self-identified, significant learning projects. Individual case studies based on in-depth interviews were constructed to examine whether progress in individuation is evidenced in these learning projects. In all three case studies, evidence of all six categories of episodes of individuation were identified. Two of the case studies provide evidence of the women having experienced significant changes in emotional interconnectedness. It was concluded that self-directed learning projects can serve as vehicles for progress in individuation.

INTRODUCTION

The purpose of the study reported here was to examine the significance of self-directed learning projects to the individual. In particular, is the real significance that of the learner moving toward individuation? Individuation is assumed to be the outcome of transformative learning. A cursory review of transformative theory is presented, and a case is made for self-directed learning as a context for studying learner transformations. Implications regarding the practices of adult education are also discussed.

BACKGROUND

Volumes have been written on or about adult learning and teaching. How adults learn, why they learn, what they learn and what all this says about how they should be taught are, among others, standard questions for adult educators. Correspondingly, a comprehensive body of literature has developed specific to adult, self-directed, self-planned learning. Since Tough's (1971) original research, we have learned a great deal about how adults go about choosing, structuring, and evaluating their learning.

The relatively recent surge of interest in transformative theory is an exciting extension of adult learning theory. Like earlier learning theories, transformation theory is concerned with what takes place while a person is learning. However, a major emphasis in transformation theory is on what happens to a person because he or she has learned. With this emphasis, there is a stronger, more comprehensive explanation of learning as a developmental process, thus enabling a clear distinction between adult and non adult learning.

Transformative educators view learning as a holistic, integrative process that involves a penetrating analysis and understanding of both conscious and unconscious elements of self. The result of these analyses is personal transformation. Personal transformation is viewed as a structural reorganization of

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self that occurs as the individual thinks, feels, reflects and acts upon all aspects of self and environment (Belenky, Clinchy, Goldberger, and Tarule, 1986; Boyd and Myers, 1988; Mezirow, 1991).

A review of the term personal transformation, as presented in current adult education literature, suggests it to be parallel to outcomes associated with the term 'individuation' as presented in Jungian literature. Mezirow's (1991) perspective transformation and Boyd and Myers' (1988) personal transformation are two examples of theories that, although diverse in their foundations, have in common the idea that significant change within an individual involves a restructuring of self at a deep level of self. Through processes such as critical reflectivity (Mezirow, 1991), or discernment (Boyd and Myers, 1988), the individual is able to come to a new understanding and ownership of his/her beliefs and values as well as to develop an authenticity in relation to self and others. These outcomes are essentially the same as outcomes termed progress in individuation.

Individuation has been defined throughout the literature in a number of ways, however, the Jungian-based definition most closely parallels the notion of personal transformation. Individuation is "...the process by which a person becomes a ... separate, indivisible, unity or whole. The mechanics of this process is the task of bringing into consciousness the unconscious contents of the mind (that is, self-awareness), thereby facilitating their differentiation and ultimately their integration" (O'Connor, 1985, p. 74). From this perspective, individuation is the psychological journey toward the integration of all aspects of Self (persona, shadow, archetypes of the collective unconscious) (O'Connor, 1985). In their work with family systems, Anderson and Sabatelli (1990) assert that individuation is the process through which "The self balances developmental demands for separateness [and] connectedness" (p. 37). Individuation is seen as movement from distancing behaviors and/or fusing behaviors, toward authentic and integrated relationships within self and with others. Further, Rannells (1986) suggests that individuation is the process of becoming an individual who is separate from, yet part of the community. She identified six categorical episodes of individuation (p 221):

> Discovery of newness.--The discovery of latent talents, attitudes, feelings and interests that exist within one's self.
> Empowerment.--An increased sense of power and autonomy, a new affirmation of self-worth and confidence.
> Turmoil.--An inner state of confusion, chaos, pain, the severity of which depends upon the situation.
> Self-responsibility.--Decision making that shows she is taking a new responsibility for and interest in herself and her future.
> Integration.--The experiences of a togetherness where there was none before within herself and/or with parts of her world.
> Interiority.--The deepened relation to her inner self.

Jung has contributed much to our understandings about psychological development and the outcomes of it in his theory of individuation. Transformative processes such as discernment and critical reflectivity provide further understandings related to how individuation comes about. From these foundations, a fair amount of projections about how to foster transformed perspectives and personal transformations within an educational context have been advanced. Mezirow and Associates (1990) provide an excellent and comprehensive collection of ways of thinking and behaving that are consistent with fostering critical reflection and transformative learning. Brookfield (1988) poses critical thinking strategies to foster adult learning, and Boyd (1989) develops the study of group dynamics as a strategy for individuals to develop transformations. Consistent among all of these strategies is the need for public discourse, a sharing, testing, validating process to enable individuals to clarify within themselves and with others their values, beliefs, attitudes and actions. Questions posed in this study relate to whether self-directed learning is or

can be a process through which individuals can progress toward individuation, a transformative process of learning about self and others.

PROBLEM UNDER STUDY

Research in self-planned learning has been plentiful, however, few studies have investigated complex psychological development issues surrounding self-directedness in learning. It seems reasonable to assume that self-directedness is a psycho-emotional, and perhaps even socio developmental state of being. To be self-directing, in this case, would mean going beyond the mechanics of planning and implementing a project, rather, using the project for internal change of consciousness as suggested by Brookfield (1987). Given this assumption, it was conjectured that projects, initiated and planned by individuals, serve either an immediate task related need or interest, or are the means for becoming more conscious of the needs and processes for reinterpreting and recreating one's personal and social worlds. It is the latter that makes self- directed learning projects an intriguing context for investigating complexities associated with transformative learning, and in this case specifically, progress towards individuation. Specifically, can self-directed learning projects serve as vehicles for progress toward individuation?

DESIGN OF THE STUDY

Three subjects (female, ages 42 - 45) from a population of 40 adults participating in an adult education program sponsored by a local church were selected in accord with purposeful sampling as explained by Merriam (1990). Each was interviewed on three separate occasions. The initial interview focused on exploring one self-directed learning project identified by the subject as being particularly significant to her. Prior to the second interview, subjects were asked to complete a personal timeline indicating significant events, learning projects and relationships that they experienced during the past 15 to 25 years. The timeline served as the basis for exploring the context of the significant project. The second interview consisted of clarifying themes that were identified in the initial interview. The third interview was used to verify the data. The interviewer presented the subject with the findings and asked for feedback from the subject regarding the accuracy of the information and inferences. All interviews were tape recorded and transcribed. The transcriptions were then analyzed for evidence of progress in individuation.

ANALYSES

The purpose of the study was to gain insight into the process of individuation and to explore the relationship between self-directed learning and significant personal growth. Therefore, the unit of analysis was the process of individuation.

The process of individuation was operationalized using Rannell's (1986) six categorical episodes of individuation. These include: discovery of newness, empowerment, turmoil, self-responsibility, integration, and interiority. Anderson and Sabatelli's (1990) changes in emotional interconnectedness (movement from distancing behaviors and or fusing ones to balanced autonomy and intimacy) were identified as evidence of individuation.

FINDINGS AND DISCUSSION

In all three case studies, evidence of the six categorical episodes of individuation was found. However, only two of the three women appear to have experienced significant changes in emotional interconnectedness. The following discusses one of the cases to illustrate the findings.

CAROL

Carol's learning experience provided the strongest support for the notion that self-directed learning projects can serve as vehicles for progress in individuation. As a result of her participation in a life planning and career assessment course, Carol experienced movement from a fused (dependent) stance toward autonomy, as well as from a distancing stance toward intimacy. For example, she reported that during the class, she discovered she was having a difficult time bringing about an ending to a past lifestyles. After spending time during the class reflecting on her situation, she was able to initiate an ending by returning to the house in which she felt she had experienced complete happiness. The action represents movement from a fused stance in which she was dependent on past happiness toward an autonomous stance in which she could get on with new beginnings such as planning her future career.

An example of movement from distancing toward intimacy is represented by Carol's experience of gaining a new sense of self as a person who is perhaps unusual, but who shares personality characteristics with a few other unusual people. This change came about after Carol completed a personality style inventory and was then asked to "stand in a corner" with like personalities. Prior to this experience, Carol saw herself as separate from others because she felt she had such a unique personality. Reporting about her experience of standing in the corner, she states: "There really is a group of people that have characteristics like me...It's not that I'm alone. I'm not the only one, and I guess maybe I always wondered."

Episodes of individuation are clearly evident throughout this case study. Discovery of newness is seen in Carol's discovery of her strengths, weaknesses, beliefs, values, and overall personality style. Empowerment is evident when Carol expresses her new feelings of value: "I came away from the class knowing that I had some strengths, and I had some things to offer...[The project] perhaps made me feel that, in fact, I am a valuable person, and I have a better, more positive image of myself."

While the project made Carol aware of strengths such as her capacity to give, it also helped her recognize the results of overextending her generosity. For Carol, turmoil was experienced as frustration with others who seldom reciprocate her generosity, and with a general feeling of emotional and physical exhaustion.

Self-responsibility is clearly evident in Carol's overall decision to take care of herself. In the months after her participation in the class, Carol initiated several changes. She left substitute teaching and accepted a job that fit her needs better. She set goals for herself regarding her household responsibilities and began setting aside time for her own personal interests. She determined that her needs were important and that she wanted more for herself. And finally, Carol made the decision to put an ending to her dream of complete happiness.

While Carol's overall decision to take care of herself is evidence of self-responsibility, it is also evidence that Carol experienced integration, a togetherness within herself that allows her to value and develop herself. Regarding her sense of self as a professional, she states: "I kind of quit -- not quit -- being a person, but I became a wife and a mom, and...I feel a place in the world again...Like there was a little missing part outside my home so to speak, as far as the professional world...I feel a spot now." Integration is also seen in Carol's experience of being at peace with herself as a result of visiting the house she lived in just before her life was disrupted by the death of her child, her husband's career changes, and financial instability. Carol affirms her new self when she says: "And while I'm not the same person that left that house, I'm okay with the person I am."

Carol's experience of bringing about an ending provided her with an experience of interiority, an experience of recognizing the journey she is on. She reports: "Maybe I realize that...I don't think

anything is ever as golden as you remember it...so maybe going back adds some perspective, some reality to what I had been thinking...Maybe it's validating that it actually happened...that there was that place, and there [were] those feelings, and that time. But it is over, and it has ended, and I see somebody else lives there. That's not our house anymore...and then I can say 'This is where I belong'."

CONCLUSIONS

There is sufficient evidence in the study to conclude that self-directed learning projects do have the potential for serving as vehicles for making progress in individuation, thus personal transformations. However, given the number of cases examined, even though other studies similar to this one also support the conclusion (Karpiak, 1991 for example) , the conclusion is rather tenuous. There are some conditions that would likely need to exist in order for the conclusion to hold. One is unquestionably the intent of the learner. If the intent is to simply learn how to do, understand, or know more about something, or in other words to satisfy some immediate task related need, then the project will not have much personal, emotional significance to the learner. However, if the learner is experiencing some sort of significant, emotionally impacted state of unrest, and engages in a project to learn how to deal with this condition, then the likelihood exists that some significant, personal change(s) will result. A second condition would include having an opportunity to have discourse with one or more others to verify perceptions, clarify positions, gain insights about further directions, etc. This would be consistent with transformative theory, and, although unintentionally, such discourse did occur during this research project. The data gathering interviews did create an opportunity for the learners to reflect upon their significant projects in terms of how they were affected by what they were learning, and what actions they took because of what they learned, and what all this means to them as persons.

IMPLICATIONS

The results of this study, in combination with transformative theory, suggest a number of significant implications for the practice of adult education. For the adult learner, the study suggests the importance of recognizing one's needs related to autonomy and intimacy in choosing projects that will lead to progress in individuation. This, along with the recognition of episodes of individuation within the individual, may encourage him/her to initiate other experiences that will result in making further progress toward individuation.

For adult educators, the study suggests that the process of self-directedness in learning can be a powerful strategy for bringing about significant personal change. Adult educators, many of whom already incorporate self-directed learning as a strategy, need to recognize the potential of this strategy. The most significant learning projects are the ones that surface from within the learner, and surface because of a need, recognized by the learner, to make some change in their thinking, feeling or acting. The primary focus of the adult educator should be on helping the learner to develop self-directedness, toward developing ownership for their ideas and actions and the assumptions and values that undergird them. The processes of planning and doing self-directed learning are vehicles for realizing significant change.

For the adult educator, the facilitation of this complex process requires the ability and willingness to recognize his/her own journey toward individuation, and where he/she is in that process. They too must own the assumptions, values and beliefs that are the basis for their behaviors in relation to others, in this case as facilitators of significant learning. How can we expect to be of help to others on a journey which we ourselves are not in the process of making?

The study also suggests several propositions that may be useful considerations either in further research or in implementing education for purposes of making progress toward individuation: 1) Individuals who

initiate a learning project for the purpose of bringing about personal change will enhance the likelihood of making progress in individuation. 2) The processes of doing self-directed learning projects need to be supported and supplemented with interpersonal dialogue to enhance the project's potential to serve as a vehicle for individuation. 3) Interviews may be an intervention particularly useful in enhancing outcomes of learning projects. 4) The composite model of individuation is a useful tool for guiding research and implementation of personal transformations in an educational setting.

LITERATURE CITED

Anderson, S.A., & Sabatelli, R.M. (1990). Differentiating differentiation and individuation: Conceptual and operation challenges. The American Journal of Family Therapy, 18(1). 32 - 50.

Belenky, M.F., Clinchy, B.M., Goldberger, W.R., & Tarule, J.M. (1986). Women's ways of knowing. New York: Basic Books.

Boyd, R.D., (1989). Facilitating personal transformations in small groups (Part I). Small Group Behavior, 10, (4), November, 459 - 474.

Boyd, R.D., & Myers, J.G. (1988). Transformative education. International Journal of Lifelong Education, 7(4), 261 - 284.

Brookfield, S.D. (1987). Understanding and facilitating adult learning. San Francisco: Jossey-Bass, Inc.

Brookfield, S.D. (1988). Developing critical thinkers. San Francisco: Jossey-Bass, Inc.

Merriam, S.B. (1990). Case study research in education: A qualitative approach. San Francisco: Jossey-Bass, Inc.

Mezirow, J., (1991). Transformative dimensions of adult learning. San Francisco: Jossey-Bass, Inc.

Mezirow, J., & Associates (1990). Fostering critical reflection in adulthood: A guide to transformative and emancipatory learning. San Francisco: Jossey-Bass, Inc.

O'Connor, P. (1985). Understanding Jung, understanding yourself. Mahway, N.J.: Paulist Press.

Karpiak, I.E. (1991). Transformation and self-renewal at midlife: Change patterns, curriculum possibilities. 32nd Annual Adult Education Research Conference [AERC] Proceedings, May 30 - June 2, 1991, Norman, Oklahoma: The University of Oklahoma.

Rannells, J.S. (1986). Women's learning: A perspective from Jungian individuation. In: K. Landers (Comp.) Exchanging at the Crossroads...Research and Practice. Program and Proceedings for the Annual Adult Education Research Conference (27th, Syracuse, New York, May 23-24, 1986, pp. 219 - 224). Syracuse, New York: Syracuse University. (ERIC Document Reproduction Services No. ED 269 571).

ADULT MATHEMATICS LEARNING: CONCERNS FROM A PRACTITIONER'S POINT OF VIEW

Fancher E. Wolfe[1]

ABSTRACT. This paper discusses the importance of adult mathematics learning and delineates the scope of the problem. The mathematics preparation of entering Metropolitan State University juniors is reported and a program to help adult students learn to think about mathematics is described. Research relevant to adult mathematics learning is briefly discussed and areas for future basic and applied research are suggested.

INTRODUCTION

Why do adults avoid learning mathematics, have relatively poor mathematics skills, and suffer from math anxiety? Obviously, avoidance is related to anxiety, and together they influence the adults' level of mathematical skills, thinking and performance. The intensity of the level of avoidance raises a fundamental question about the perceived value of mathematical ability to the citizen worker. If the citizen worker functions well enough in society without good mathematical skills, then what is lost? What is lost is the ability to engage in all those activities, both personal and career related, that will lead to a richer, more meaningful, life. The ability of individuals to employ mathematical skills and concepts in their life and to incorporate these concepts into their world view seems to be a fundamental, bottom up reason to make mathematics available to adults. The lack of mathematical skills is a limiting defect because those lacking in the requisite mathematical skills are unaware of the vistas of work and life experience that are forever closed to them. This is a more important reason for concern than those given in the plethora of reports like Everybody Counts (National Research Council,1989) that from the top down decry the lack of quantitative literacy among high school and college graduates. Yet the most important reason to be concerned about these issues is the need to make the learning of mathematics meaningful for our adult students.

SIZE OF THE PROBLEM

"In the last decade, the number of the college students (in the U.S.) who are 25 or older has increased 19 percent, to an estimated total of 5.8 million adults in 1991, from 4.8 million in 1981 according to the National Center for Educational Statistics. The Center estimates that about 43 percent of all college students are at least 25 today, compared with 39 percent in 1981" (Sims, 1991). Using enrollment analysis data from the Minnesota Higher Education Coordinating Board (1990), the comparable percent of Minnesota students over 25 years of age in 1988 is 36 percent of post-secondary enrollment. Working with the Board's estimates, I conclude that from now to the end of the century we will be working with 396,000 adult students over the age of 25 years who will need four to six quarters of mathematics and statistics instruction to reach an "appropriate level" of quantitative ability as a citizen worker. "Appropriate level" refers to the ability to use mathematics both conceptually and applied in life and work situations. This can be described as being able to use at the applied level the topics usually included in intermediate algebra, college algebra, applied finite mathematics, general calculus and a first course in statistics.

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The level of preparation and the recency of the last school learning experience of typical adult students can be described from a sample of 146 students entering Metropolitan State University in the spring of 1991 to begin their junior year. Those students who had completed three algebra courses (two high school and one college algebra course) represented 34 percent of the group, and the mean number of years since the last class was nine years. Twenty-one percent had no high school algebra nor any mathematics beyond high school. Twenty percent had one high school course in algebra, and 17 percent had two courses in high school algebra. For both of these groups, the mean number of years since the last class was about 10 years. For those students taking a 22-item arithmetic test, the percent correct ranged from 56 percent correct for those with no high school algebra, to 73 percent correct for those with two high school algebra courses. On an 18-item intermediate algebra test, these two groups got 25 and 48 percent correct respectively. The level of these students clearly shows the starting point for instruction and the danger of making any assumptions about where to begin. These data also point out the vast heterogeneity of adult students who must be accommodated by a mathematics program.

DIAGNOSTIC TEST SCORES FOR ENTERING JUNIORS

# Math courses completed	N	%	Arithmetic % correct	Algebra % correct	Average # years since last class
0 Algebra	31	21.2	56	25	--
1 Algebra	30	20.5	64	26	17.1
2 Algebra	25	17.1	76	48	16.4
3 Algebra	49	33.7	78	56	9.1
2 Algebra & calculus	4	2.7	82	86	8.5
3 Algebra & calculus	7	4.8	97	91	11.7

Total N = 146

The challenge facing adult educators is compounded by the shortened instructional time frame available for the processing and internalization of new mathematical concepts. Ideally, the student should have acquired concepts through college algebra in 12 to 14 years of schooling. The reality is that we must bring the adult student to the desired level of mathematical competence in three to six quarters of study.

The number of adult students planning to engage in post secondary education at public institutions in Minnesota in the next ten years and the level of their preparation clearly define the problem for adult educators. There is no reason to believe that estimates of this magnitude will not hold for the balance of the United States.

CURRENT METRO STATE MODEL

The Metro State program is designed to be fundamental and terminal because the courses involved--Mathematical Problem Solving, College Algebra, Statistics, Applied Finite Mathematics, and Calculus--will be integrated to generate knowledge and skills that will be useful in everyday work and life activities. By this approach, we will of necessity exclude some topics typically studied by those students who may become mathematics majors.

The keystone of this curriculum is the course called Mathematical Problem Solving. It is designed to present a number of relevant topics to the returning adult student. The content of this course incorporates a number of ideas from current theory.

First, the course attempts to incorporate applications from reality therapy and rational emotive therapy to help students reduce their anxiety and free them to deal with the mathematical content of the course. Dryden (1990, p. 16) states:

> To reiterate, this means helping clients to acknowledge: (a) that past or present activating events do not cause their disturbed emotional and behavioral consequences - rather it is their irrational beliefs about these activating events that largely create their disturbed feelings and behaviors;... (they) tend to disturb themselves by clinging to their self-defeating thoughts, feelings, and actions, nevertheless they can largely (but not totally) overcome their disturbances in the long run. They can do this by working hard and repeatedly, both to dispute their irrational beliefs and to counteract the effects of these beliefs by strongly acting against them.

Second, the mathematical problem solving course is structured for instructional purposes around the cooperative learning model of Johnson, Johnson and Smith, described in their work Active Learning: Cooperation in the College Classroom (Johnson, Johnson & Smith, 1991). Mathematical skills are learned by practice and active involvement, and a cooperative classroom seems to be the best method currently available to create that student involvement. Long & Long (1987) report that students who are actively engaged in thinking about the material that they are studying do better than those students who just read, underline and re-read in preparation for an examination. Metro State's integrated mathematical program is designed to use cooperative learning in all courses.

Third, the basic course attempts to incorporate work in meta-cognitive behavior, practice higher order thinking, and identify tacit knowledge about mathematics and real world applications.

METHODOLOGICAL ISSUES

Before suggesting areas for possible research, a pragmatic discussion of types of research approaches may be valuable. Of course, true basic research and theory building is a necessary foundation for an effective long-run solution to the difficulties that adults have in learning mathematics. As this theory is developed, there is also a parallel need for application of "State of the Art" theory to the classroom as soon as possible. To use the technology transfer metaphor, we need curriculum engineers to work hand in hand with the cognitive psychologists and other basic researchers to bring the ideas to the classroom as soon as possible.

Additionally, we need a reporting system that is faster and less rigorous than the traditional juried system to disseminate successful and unsuccessful efforts to engage adult students in the effective study of mathematics. Perhaps much of the problem lies in the perception that if we attempt a simple research effort, it must first be "proper" and then, perhaps, useful.

RESEARCH FOUNDATIONS

Two major resources for the development of our mathematics program are the cognitive psychology mental models literature and the work on expert behavior that attempts to identify tacit knowledge. These topics help us begin to engage in understanding of the student's learning procedures and to identify the instructor's tacit knowledge that is implicit in the instructor's classroom behavior.

Adult students generally have well developed formal-operational skills. They create many mental models. Mental models refer to the cognitive structures or schemata that individuals create in their minds to help them understand abstract concepts and to make sense of the world. At a particular time and for a particular student, the mental models may be well-formed or ill-formed, partial or complete, and often incorrect.

One major role of research is to devise ways of identifying a student's incomplete or incorrect mental model so that the instructor can help the student see where his or her mental model of a process is weak. An example of a mental model to be explicated in the classroom is the statistical problem-solving model by Chervany, Collier, Fienberg, Johnson and Neter (1977) in which they develop a ten-stage model based around (1) comprehension, (2) planning and execution, and (3) evaluation and interpretation. Also, the Algebridge series from the Educational Testing Service (1990) is an example of attempting to use a mental model construct to diagnose incorrect student responses.

Tacit knowledge is a second important area for research on the adult mathematics student. Good research insight can come from introspection of one's own tacit knowledge of subject matter and how to apply that tacit knowledge to problem-solving. Tacit knowledge is that knowledge understood by the teacher without being openly expressed. As Sternberg (1988, p. 226) says, "Experts in real world domains differ from novices in among other things having acquired tacit knowledge in their fields." Teachers of mathematics are those who do mathematics well, creating a conceptual and communications gap between student and teacher that is the largest among all disciplines. One of the chief characteristics of the novice is this lack of tacit knowledge.

Other areas that build on the foregoing research and should be incorporated in the mathematics learning experience are learning activities related to affective behavior and higher order thinking. Sherman (1985), in his discussion of learner-controlled variables like affective behavior and higher order thinking, questions the institutional approach to helping the student develop these skills. This current institutional approach incorporates separate courses on mathematics anxiety and learning-how-to-learn, rather than including these topics in discipline courses. Sherman (1985, p. 91) states, "However, from an institutional approach, organized attempts to modify learner controlled variables have usually been isolated from mainstream academic activities." Further, Resnick (1987) indicates that learning-how-to-learn programs are most successful when they use group learning, when the practitioner-expert models appropriate behavior in an overt manner, and the programs are organized around specific subject matter.

RESEARCH QUESTIONS

1. What are some specific skills and techniques that can be learned which will facilitate the reading of mathematics and lead to a greater conceptual understanding?

2. Can reading analysis methods be developed as a diagnostic technique for the discovery of students faulty mental models?

3. How can the adult learner's contextual and tacit knowledge be integrated into the mathematics learning process?

4. Can counseling techniques such as reality therapy and rational emotive therapy be incorporated into the mathematics curriculum to reduce mathematics anxiety?

5. Can the adult learner's developed reading skills be used to enhance mathematics learning?

6. Considering the temporal-structural problem of collapsing the adult students learning-internalizing time frame can students with low skills learn arithmetic and algebra simultaneously?

7. What is the congruence of the adult student's current mental models with the mathematical concepts being taught?

8. Can higher order learning and the development of meta-cognitive skills enhance the effectiveness of adult mathematics learning?

9. How can mathematics learning be changed to better motivate the adult student?

10. What are the mathematical problem solving methods and concepts that are really used by professionals in business, industry, and government?

11. How can we incorporate the practitioner-expert's mental models into curriculum design and instructional methods?

LITERATURE CITED

Chervany, N. L., Collier, R. O. Fienberg, S. E., Johnson, P. E.& Neter, J. (1977). A framework for the development of measurement instruments for evaluating the introductory statistics course. The American Statistician, 31, (1) 17-33.

Dryden, Windy. (1990). Rational-emotive counseling inaction. London: Sage.

Educational Testing Service, The College Board. (1990). Algebridge. Providence, RI: Janson Publications Inc.

Johnson, David W., Johnson, Rodger T. & Smith, Karl A. (1991). Active learning: Cooperation in the college classroom. Edina, MN: Interaction Book Company.

Long, James D. & Long, Elizabeth, W. (1987). Enhancing student achievement through meta-cognitive training. Journal of Developmental Education, 11, (1) 2-5.

Minnesota Higher Education Coordinating Board. (1990). Enrollment analysis and outlook, 1990-1991 - 1999-2000. St. Paul, MN.

National Research Council. (1989). Everybody counts: A report to the nation on the future of mathematics education. Washington D.C.: National Academy Press.

Resnick, Lauren B. (1987). Learning in school and out. Educational Researcher, (Dec) 13-20.

Sherman, Thomas M. (1985). Learning improvement programs: A review of controllable influences. Journal of Higher Education, 56 (11) 85-100.

Sims, C. (1991, August 4). Late bloomers. The New York Times, Education Supplement, p. 16.

Sternberg, Robert J. (1988). The triarchic mind: A new theory of human intelligence. New York: Viking.

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Addendum

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TEACHING TOWARD SELF-DIRECTEDNESS: AN ADAPTIVE TEACHING-LEARNING MODEL

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ABSTRACT

Recent developments in perspectives on self-directed learning in the field of adult education have created the need for a broader understanding of the adult educator's role in fostering self-directedness. This paper employs concepts from fields of adaptive teaching and situational leadership to develop an adaptive teaching-learning model that adult educators may use to increase adult learners' competencies for self-direction and self-motivation.

TEACHING TOWARD SELF-DIRECTEDNESS: AN ADAPTIVE TEACHING-LEARNING MODEL

Tim Ellis

INTRODUCTION

The last several decades have brought dramatic changes to perspectives on self-directed learning in the field of adult education. During the 60's and 70's, sparked by theory and research by Knowles, Tough, Rogers, and others, adult educators came to the realization that adults are self-directed individuals and ought to be treated differently than children. Emerging from this literature, were several basic assumptions regarding self-directed learning and adults:

1. Adults have a natural ability and desire to be self-directed; if placed in an appropriate environment and given the opportunity, adults will naturally become self-directed learners (Knowles, 1975; 1980; Brookfield, 1985, p. 2-4).
2. The task of adult educators is to unleash the innate but still dormant powers of adults to be self-directed learners (Knowles, 1975; 1980; 1984).
3. Learning to be self-directed individuals consists of learning a set of procedural skills that enables learners to conduct their own learning with or without a teacher (Tough, 1967; Knowles, 1975; Moore, 1980).
4. Collaborative teaching methods with the use of learning contracts are ideal methods to use to facilitate this transformation of adults into self-directed individuals (Knowles, 1975; 1980; Brookfield, 1986).

Recently, however, self-directed learning theory and research have challenged several aspects of these assumptions about adults and their self-directedness. The following are revised assumptions that appear to be emerging in self-directed learning literature:

1. Not all adults have the same levels of ability or desire to be self-directed--some may have high levels of abilities, some very little, and others may be able to conduct their own learning competently in some areas, under some circumstances, but not in others (Pratt, 1988; Brookfield, 1986, p. 94; Joblin, 1988).
2. Adults do not always learn naturally to become competent self-directed learners--they may resist assuming responsibility for their learning (Brookfield, 1985, p. 2).
3. Becoming a "competent" self-directed learner involves more than learning procedural skills--also needed are attitudes, personality characteristics, broad understanding of self, and ability for self-critical thought (Brookfield, 1986, p. 40; Mezirow, 1985; Oddi, 1987).
4. A variety of teaching approaches are needed to teach adults to become self-directed learners. Teachers need to choose the approaches that are appropriate to each unique learning context (Joblin, 1988; Grow, 1991).

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These revised assumptions suggest the need for more thorough understanding of the adult educators role as facilitators of self-directed learning than that provided by earlier theorists (Cherin, 1983). The purpose behind the development of the adaptive teaching-learning model presented in this paper is a concern to translate these new understandings in self-directed learning theory into a format that adult educators may practically apply in practical ways in their teaching.

It is the author's goal to assist practitioners to become more flexible in teaching methods they employ to increase adults' abilities for self-directedness. As adult educators become skilled in assessing competencies adults have and do not have for self-direction and self-motivation, and adept in applying a variety of methods across a spectrum of learning situations, it is felt that adult educators will be able to more effectively assist learners in their growth toward competent self-directed learning.

The specific objectives of this paper are: (1) to develop a model that adult educators may use in their teaching to implement a more adaptive approach to fostering capacities for self-directedness, and (2) to explore the usefulness of several concepts from the fields of adaptive teaching and situational leadership within an adaptive approach to teaching that will simulate self-directedness in learners.

THE MODEL

The Adaptive Self-directed Learning (ASDL) Model presented in this paper (see Figure 1 below) is based on a number of assumptions:

1) Adult learners may arrive in a given teaching-learning situation at any point on a continuum of ability for self-direction and self-motivation. Ability or competence in self-direction is defined as the extent to which learners have the knowledge, attitudes, and skills needed to plan, implement, and evaluate their own learning wisely, efficiently, and effectively. Self-motivational competence is defined as the extent to which learners have the vision, commitment, and discipline needed to continue to motivate themselves to learn despite opposing obstacles, failures, and the absence of external motivational support.

2) Competencies an adult acquires for self-direction and self-motivation in one learning area or learning situation may or may not transfer to other learning areas or situations (Candy, 1987; Grow, 1991). For example, a learner may have acquired confidence in learning some topics in an academic setting through experience and learning success, but may become completely unnerved and incapacitated when attempting to learn how to swim. Another learner may have acquired prior knowledge and skills needed to be quite self-directed and competent in managing learning in one of the arts, but be completely in the dark as to how to manage one's own learning in auto mechanics.

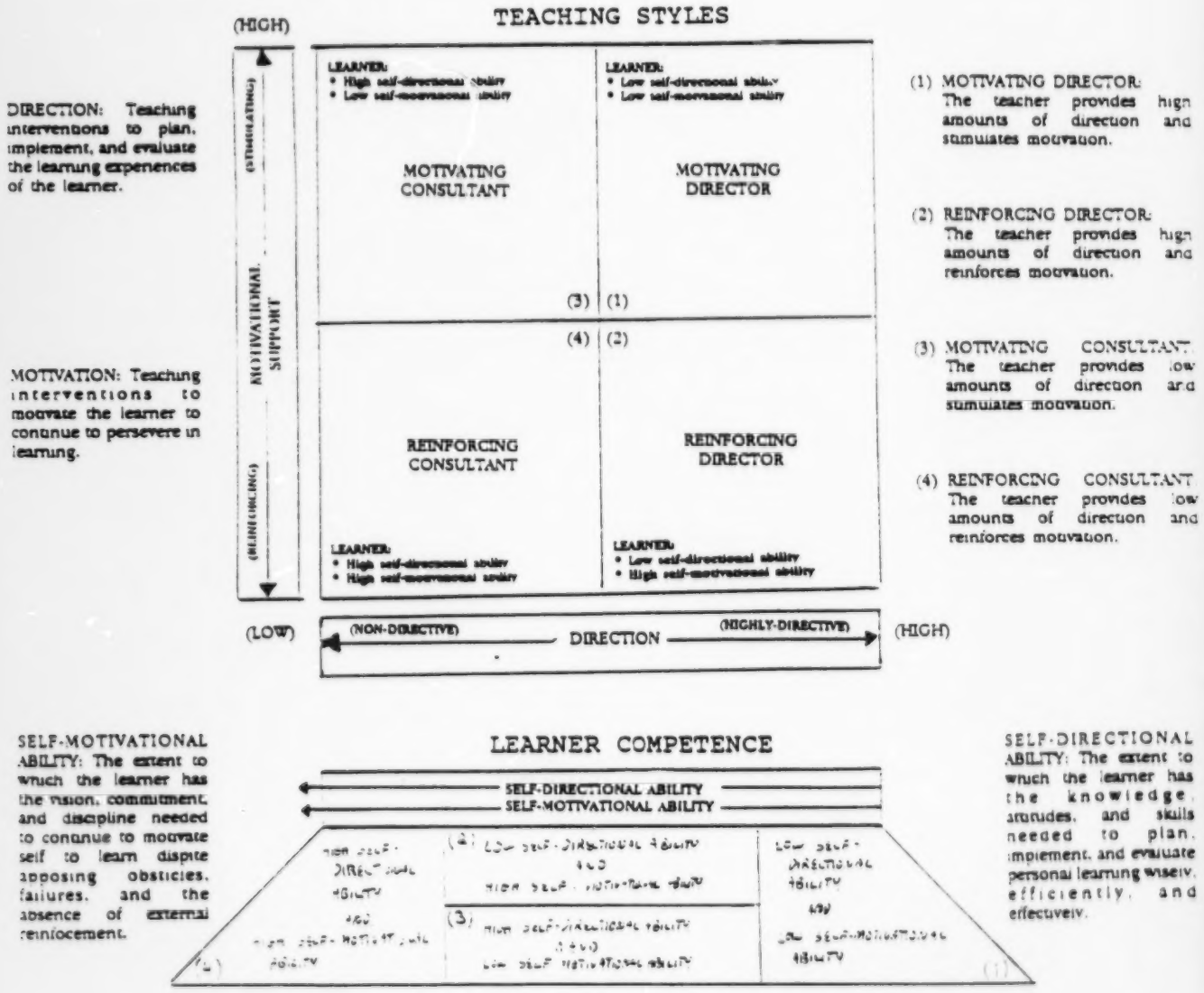
3) Through the development of self-directional and self-motivational competencies in a variety of learning contexts and under a variety of conditions, adults' acquired competencies in self-direction and self-motivation may become generalizable to a wider and wider spectrum of learning situations (cf. Candy, 1987).

4) Just as there is no one best way to teach adults in all situations (Pratt, 1988), so also there is no one best teaching style or strategy to use in all circumstances to increase capacities for self-directedness. One learning situation may require a highly directive style, while in another a non-directive approach may be most appropriate. In one situation an adult learner may need high amounts of (extrinsic) motivational support that stimulates motivation, while in another learning context very low amounts of motivational support that primarily reinforces a learners intrinsic motivation may be required.

5) The choice of an appropriate teaching style or combination of teaching styles to increase learners' competencies for self-direction and self-motivation in a given learning context should be sensitive to the current self-directional and self-motivational ability of the learner in similar situations. (Other variables also need to be considered, but for purposes of this paper, only learner competence variables are considered).

FIGURE 1

AN ADAPTIVE SELF-DIRECTED LEARNING MODEL


TEACHING STYLES
(HIGH)
DIRECTION: Teaching interventions to plan, implement, and evaluate the learning experiences of the learner.
MOTIVATIONAL SUPPORT
(STIMULATING)
(ENCOURAGING)
MOTIVATION: Teaching interventions to motivate the learner to continue to persevere in learning.
LEARNER:
• High self-directional ability
• Low self-motivational ability
MOTIVATING CONSULTANT
(3)
LEARNER:
• Low self-directional ability
• Low self-motivational ability
MOTIVATING DIRECTOR
(1)
(4)
(2)
REINFORCING CONSULTANT
LEARNER:
• High self-directional ability
• High self-motivational ability
REINFORCING DIRECTOR
LEARNER:
• Low self-directional ability
• High self-motivational ability
(LOW)
(NON-DIRECTIVE)
DIRECTION
(HIGHLY-DIRECTIVE)
(HIGH)
(1) MOTIVATING DIRECTOR: The teacher provides high amounts of direction and stimulates motivation.
(2) REINFORCING DIRECTOR: The teacher provides high amounts of direction and reinforces motivation.
(3) MOTIVATING CONSULTANT: The teacher provides low amounts of direction and stimulates motivation.
(4) REINFORCING CONSULTANT: The teacher provides low amounts of direction and reinforces motivation.
LEARNER COMPETENCE
SELF-DIRECTIONAL ABILITY
SELF-MOTIVATIONAL ABILITY
SELF-MOTIVATIONAL ABILITY: The extent to which the learner has the vision, commitment, and discipline needed to continue to motivate self to learn dispite opposing obsticles, failures, and the absence of external reinfocement.
SELF-DIRECTIONAL ABILITY: The extent to which the learner has the knowledge, attitudes, and skills needed to plan, implement, and evaluate personal learning wisely, efficiently, and effectively.

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APPLICATION: TEACHING TOWARD SELF-DIRECTEDNESS

The ASDL model provides a dynamic framework to illustrate the usefulness of several teaching strategies from the fields of adaptive teaching and situational leadership for increasing competencies for self-directedness. The strategies are: inaptitude circumvention, direct aptitude development, and fading directiveness.

INAPTITUDE CIRCUMVENTION

Inaptitude circumvention is defined by Corno & Snow (1986) as teaching that finds ways "to circumvent or otherwise compensate for existing sources of inaptitude so that further instruction can proceed" (p. 606). Learner inaptitudes (inabilities) are "circumvented by instruction that takes over the relevant cognitive or behavioral burdens for these learners" (p. 621). By using techniques that remove or take over some of the processing or behavioral burdens from less able learners, adult educators may enable learners to succeed at a particular learning task where otherwise they would have failed or performed poorly.

In the language of the ASDL model, this strategy reduces the self-motivational and self-directional burdens that a learner must assume, thus making it easier for the learner to succeed in learning. The teacher adapts levels of direction and motivational support to match learner competence in order to assure achievement success.

The inaptitude circumvention strategy indirectly builds competencies for self-directedness in several ways. The direction and motivational support provided by the teacher serve to model for the learners how they may direct and motivate their own learning in similar learning situations in the future. In addition, by assuring that the learner experiences achievement success, the educator assists the learner to develop confidence, and encourages positive attitudes toward continued learning.

DIRECT APTITUDE DEVELOPMENT

Direct aptitude development is teaching that focuses directly on developing aptitudes needed for further instruction (Corno & Snow, 1986). Corno & Snow observe that in some circumstances teaching may focus directly on assisting learners to develop generalizable cognitive and motivational strategies to apply in more effective problem solving and decision making in future learning.

Numerous teaching strategies for developing specific critical thinking, motivational, and learning management skills may be used for direct aptitude development. Brookfield (1987), for example, discusses methods for cultivating critical thinking skills. Brophy (1983) reviews various teaching methods designed to develop positive motivation and to reduce negative performance motivation such as low self-efficacy, high anxiety, external locus of control, a tendency to internalize failure. Pratt (1988) describes how adult educators may step back from the learning experience and reflect on the learning process itself with the learner. Learning contracts may be utilized to focus attention on the learning process and assist adults to develop skills for managing personal learning (Brookfield, 1986; Caffarella & Caffarella, 1986).

Adapting levels of direction and motivational support to learner competence remains a critical ingredient for learning success in a direct aptitude development approach. Some learners may be highly motivated to learn generalizable self-directional and self-motivational skills. Others may not. Some may pick up competencies quickly with little instructional mediation required. Others may need a highly directive approach of teacher modeling, closely guided practice, carefully graduated task difficulty, and consistent motivational encouragement before they will be able to integrate competencies and use them effectively.

FADING DIRECTIVENESS

The strategy of fading directiveness has been described in situational leadership theory (Hersey and Blanchard, 1984), adaptive teaching theory (Corno & Snow, 1986), and self-directed learning theory (Grow, 1991). Corno & Snow (1986) provide the following description:

> As learners gain in aptitude through experience with respect to the instructional goals at hand, such teaching adapts by becoming less intrusive. Less intrusion, less teacher or instructional mediation, increases the learner's information processing and/or behavioral burdens, and with this the need for more learner self-regulation (p. 621).

In the language of the ASDL Model, as learners gain confidence and ability in self-direction the teacher gradually "fades" directiveness. And as learners gain commitment and discipline needed for self-motivation, the teacher gradually "fades" motivating behaviors. However, as the teacher fades directiveness and/or motivating behaviors, the teacher also is careful to insure that learners always have the ingredients necessary for sustaining motivation and for continued achievement success.

CONCLUSIONS AND IMPLICATIONS

An adaptive approach to teaching learners to be self-directed provides complex challenges for research and practice. Research will need to grapple with questions such as: To what extent does effectiveness of method depend on the characteristics of students taught? What methods are most effective with learners at different levels of ability for self-direction and self-motivation? What capacities for self-direction and self-motivation are developed by various teaching styles and strategies?

An adaptive approach also creates complex challenges for the adult educator. The adult educator who attempts to implement an adaptive approach can not rest easy in a "one approach fits all" mentality. As Corno and Snow (1986) observe, adaptive teaching is a complex capability that requires constant "alertness, 'withitness,' a propensity to check students' understanding continuously in a variety of ways, knowledge about how best to use what is observed, and a hesitant attitude about using any one approach with all students" (p. 624). The adaptive adult educator must become a great diagnostician, able to "measure students with a practiced eye" (Rubin, 1984), and translate this into an instructional approach that challenges learners to move toward greater and greater competence in self-direction and self-motivation, yet which still assures that learners continue to experience achievement success.

(References will be provided upon request)

ISSUES FOR NON-TRADITIONAL UNDERGRADUATE STUDENTS LIVING IN TRADITIONAL COLLEGE AND UNIVERSITY RESIDENCE HALLS: A MODIFIED DELPHI STUDY

Susan K. Herr

ABSTRACT

Drawing on Cross' Chain of Response Model (COR), this study reports the predominant issues which impacted the residential experience for undergraduate students twenty-five years of age or older living in traditional college and university residence halls. Through the application of a modified Delphi Study, analyzed qualitatively, students within a four state area reported their predominant barriers and enablers to living in traditional residence halls. These results were further analyzed and compared to information collected from chief housing officers through survey methods. A discussion of the implications and recommendations follows.

INTRODUCTION

There is little question that learning for adults is a cornerstone for survival and coping in a rapidly and radically changing world. Many adults are returning to the traditional university setting for learning. Aslanian and Brickell (1988) concluded that adult students are more numerous and a more significant presence than institutions of higher education expected. They estimated that 6.2 million Americans over the age of twenty-five might be involved in credit learning.

Non-traditional learners (those twenty-five years and older) are characteristically different from their traditional age counterparts in a variety of ways. Their motivational perspectives and personal needs are different (Iovacchini, Hall and Hengstler, 1985, and Richtor-Antion, 1986). However, whether traditional institutions are prepared to respond to the unique needs of adult learners holistically has yet to be explored in many areas such as housing for students.

Strong evidence exists to support the idea that residential housing can be a significant component of a student's total educational experience. For instance, students living on campus have reported greater satisfaction with their overall

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college experience, adjusted better socially and expressed a greater sense of belonging within the institution, were closer to resources available on campus, and were provided with numerous opportunities to develop cognitively, affectively and psychosocially through their experiences with on campus living (Feldman and Newcomb, 1969; Astin, 1977). Of great interest has been the finding that students living on campus are more likely to complete a four year degree (Astin, 1977).

With the increase in numbers of non-traditional students on today's college and university campuses, it is apparent that some of these students currently are housed in traditional residential facilities. It also seems likely that the issues that define the quality of the housing experience are different for older students than traditional aged students and that most residential programs best meet traditional needs. Whether chief housing officers are aware of, or sensitive to, such differences could impact the kind of experience non-traditional students living in traditional housing might have.

Cross' 1981 Chain of Response Model (COR) identifies relevant variables related to participation in adult education. One such variable, labeled as barriers and opportunities, describes the importance and nature of experiences that influence the success of participation and subsequent engagement. Barriers might be described as institutional, situational or dispositional. Institutional barriers describe policies or procedures that negatively affect the learner. Situational barriers describe life circumstances, such as how adult roles influence or impede the ease of participation. Dispositional barriers are attitudes and beliefs, or other personal qualities that influence the motivation to participate.

Drawing on Cross' COR Model, the purpose of this study was to identify the predominant issues which impact the residential experience for undergraduate students twenty-five years of age or older living in traditional college and university residence halls. While literature exists that bridges adult learning with some student services in higher education (i.e. counseling services), a distinct void exis ; in the application of adult student research with student housing research.

METHODS

Before the primary study was conducted, the researcher administered an initial survey of chief housing officers in Ohio, Indiana, Michigan and Illinois. Each chief housing officer was asked to provide basic demographic data, respond to two open-ended questions and provide the name of a non-traditional student living in a residence hall who might participate in the primary Delphi study. Of the 148 officers

identified, 101 responded to the survey, and 54 provided student names.

Issues for the non-traditional students were identified and clarified through a modified Delphi Study. The Delphi procedure is a communication process structured so that a group of individuals, as a whole, deal with a complex problem (Linstone and Turoff 1974). A panel of "experts" is assembled to provide initial responses to a posed question or issue. The information is then fed back to the panel for further clarification, explanation or illumination of their opinions. This process of data collection, feedback and clarification is repeated until the researcher decides that the procedure accomplished the appropriate objectives.

To identify issues for this study, the researcher assembled a pool of thirty students twenty-five years of age or older living in traditional residence halls at colleges or universities within a four state midwest area. The students were selected from the pool of names provided by chief housing officers. Care was exercised to randomly select a panel that was representative of the larger distribution of responding institutions so that twelve men from private institutions, six men from public institutions, six women from private institutions and four women from public institutions formed the Delphi panel of experts.

Through a process of three rounds of questions, administered by mail, the panel was asked to repeatedly identify, rank and clarify barriers and enablers to their overall residence hall experience and subsequent satisfaction. Twenty-five of the students participated through the first two rounds; twenty-four students responded in the final round. Data were collected anonymously and were analyzed qualitatively.

MAJOR FINDINGS

The chief housing officers reported at least 7180 students twenty-five years of age or older who were currently living in traditional residence halls. The total number of students housed on these campuses in traditional residence halls in 1990-91 was 230,030. Most chief housing officers were aware of non-traditional students on campus, but many of the officers wrote that because this was a negligible number of students, little had been done to accommodate this group specially.

The non-traditional students identified barriers as unique needs or issues that adversely affected their participation or satisfaction with overall residence hall experiences. The top five barriers as identified by non-traditional students were maturity differences, too much noise, not having housing over breaks, lack of same age companionship, and policies that were too restrictive for adult life styles. These barriers were analyzed according to

Cross' COR Model. Three of the top five barriers could be explained as institutional barriers, according to policies or procedures institutionally that affected the students' participation (and subsequent satisfaction): too much noise; not having housing over break periods; and policies that were too restrictive. Maturity differences and lack of same age companionship were explained as situational or dispositional barriers, based on issues defined by adult status or attitudes or beliefs held by the participant.

The non-traditional students identified enablers as circumstances that positively affected their participation or satisfaction with overall residence hall experiences. The top five enablers as identified by non-traditional students were accessibility to campus facilities and resources, convenience, academic focus, involvement, and faculty contact and affordability (tied). Cross' COR Model likewise was applied, unconventionally, to the enabling issues. Five or the six predominant enablers were analyzed as institutional enablers. Policies or procedures controlled by the institution, or existent because of institutional practices, explained the positive influence of enablers for accessibility, convenience, involvement, faculty contact, and affordability. Enhanced academic focus and involvement were explained as dispositional enablers, dependent on the attitudes and beliefs of the participants.

CONCLUSIONS AND RECOMMENDATION

In a four state area, based on data from only 101 institutions, nearly 7200 students twenty-five years of age or older were identified as living in traditional residence halls. This represents a sizeable number of unique students housed on campus in facilities originally designed and intended for much younger students. Aslanian and Brickell (1988) estimated that 6.2 million adults in America had engaged in some kind of credit learning at an institution of higher education in a given year. While their study reported the majority of these students as married, part-time students living at home, not all students fit this description.

There are still many single, full-time students who choose to enroll in higher education and who do not have homes within commuting distances of the institutions they select. These students appear to be more flexible in their selections of institutions and housing accommodations. Higher education could respond to this newly identified minority by addressing some of their living and learning needs through housing. It is recommended that chief housing officers and university planners begin to identify non-traditional students on their campuses and to explore with these students how their needs can best be met. Along with this, it is recommended that chief housing officers examine their assumptions concerning who is living on campus in traditional residence halls and why. This assumption may need challenging in light of the reported demographic changes in student populations.

Issues for non-traditional students living in traditional housing were identified and grouped according to Cross' COR Model. This study affirmed that barriers and enablers affected participation of non-traditional students in traditional housing. Cross' COR Model worked well to describe the nature of barriers and enablers as institutional, situation or dispositional.

Most of the barriers and enablers identified by non-traditional students were institutional in nature. That is to say that the barriers were explained by institutional policies or procedures that adversely affected participation and subsequent satisfaction. Institutional enablers were explained by conditions inherent in institutional on-campus housing or the phenomenon of living on campus which positively affected participation and subsequent satisfaction.

Considering that the barriers and enablers identified were primarily institutional in nature raised a question concerning the assumptions made by university administrators as to why non-traditional students do not live in residence halls or participate in traditional on campus housing. It is speculated that chief housing officers have been operating under a false assumption that the only barriers to on campus living for non-traditional students have been situational or dispositional.

It is recommended that chief housing officers and university planners examine their assumptions concerning participation, barriers and enablers, and design solutions accordingly. If the student population reports institutional barriers, improvements that truly address these concerns should be implemented.

For any of these conclusions and recommendations to be successfully considered and mastered, knowledge of non-traditional students is necessary beyond the basic identification of issues. A final recommendation is that chief housing officers, university administrators and residence hall staff actively engage in learning about adult students, and their issues both developmentally and institutionally. Preparatory curriculums should include more information about the non-traditional students and their experiences.

THE CAMPUS OF THE FUTURE

Should the findings from this research be considered seriously in light of previously projected demographic changes in higher education, campus environments and residence hall programs of the future would take on new dimensions. The non-traditional student would be fully involved in the educational experience of living in community and may in fact become less non-traditional. The climate,

institutionally, would support the concept that all students, regardless of age, have contributions to make to the institution, and can benefit from the experience of being involved in residence hall programs. Lifelong learning would become a reality as institutional procedures provide opportunities for adults to return to campus as members of the community, and not as visitors who just pay fees. The acceptance of diversity in age, life goals and life structures could be encouraged through multi-generational living environments.

The campus of the future might include age-specific housing accommodations or integrated, interactive housing, depending on the institutional mission and facilities available. But regardless, support for non-traditional students to be involved in community living and to receive the same benefits of the on campus experience would be central to the values of higher education and the design of the campus of the future.

REFERENCES

Aslanian, C. B., and Brickell, H. M. How Americans in Transition Study for Colllege Credit. New York: College Entrance Examination Board, 1988.

Astin, A. W. Four Critical Years: Effects of College on Beliefs, Attitudes and Knowledge. San Francisco: Jossey-Bass, 1977.

Cross, K. P. Adults as Learners: Increasing Participation and Facilitating Learning. San Francisco: Jossey-Bass, 1981.

Feldman, K. A., and Newcomb, T. M. The Impact on College On Students. San Francisco: Jossey-Bass, 1969.

Iovacchini, E. V., Hall, L. M., and Hengstler, D. D. "Going Back to College: Some Differences Between Adult Students and Traditional Students." College and University, Fall 1985, 43-54.

Linstone, H. A., and Turoff, M. The Delphi Method: Techniques and Applications. Reading, MA: Addison-Wesley, 1975.

Richtor-Antion, D. "Qualitative Differences Between Adult and Younger Students." NASPA Journal, Winter 1986, 23(3), 58-62.

Practitioner Conducted Evaluation Studies: Doing Research/Evaluation in the Work Place

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ABSTRACT

This conference addresses links between research and practice, e.g. practitioners keeping up and incorporating findings into practice. Another link is practitioners conducting research or evaluation studies in the practice setting. The limits and implications of workplace realities for "doing it right" are demonstrated by an analysis of a patient education evaluation.

The patient education evaluation was conducted to assess the system for providing patient education and to identify needed improvement. The study design included assessment of situational, input, process, product and impact factors. Materials, resources, communication, teaching methodologies, roles and responsibilities, effectiveness and satisfaction were examined.

Key stakeholders were involved in both a small steering committee and larger advisory committee. The steering committee designed and conducted the evaluation.

Data collection was by four different surveys, focus groups from five different stakeholder populations and an audit of over 500 medical records. Data were analyzed using SPSS-PC.

The major types of workplace limitations encountered were constraints on scientific rigor, lack of resources, politics and organizational events. These limitations detracted from scientific rigor, however, the study was useful and rigorous enough to provide a basis for action. Implications for the preparation of practitioners are examined.

Practitioner Conducted Evaluation Studies: Doing Research/Evaluation in the Work Place

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The link between research and practice has been the focus of this conference for many years. While the issues of practitioners keeping up and utilizing research findings in their practice have been addressed many times, relatively little attention has been given to practitioners conducting research or evaluation studies and the inherent problems. There are work place characteristics that limit a practitioner's ability to "do it right." Some of these limitations will be addressed through discussion of an evaluation of patient education and some implications for graduate education will be identified.

THE SETTING

The Patient Education Evaluation was conducted at one of the ten medical centers of the Southern California Kaiser Permanente Medical Care Program (KPMC,) a health maintenance organization. The KPMC is composed of three separate entities. The Health Plan is essentially an insurance company that offers a wide range of benefits to members. The Permanente Medical Group is a physician group practice that is fully owned by the physician partners. The third entity is the Kaiser Foundation Hospitals. The Health Plan contracts with the Medical Group to provide medical care, both on an inpatient and outpatient basis, and contracts with the Hospitals to provide hospital care to Kaiser members. There are regional offices that oversee the local medical centers and provide or oversee some functions for all three entities, such as Employee Relations, Pharmacy, Information Systems, Professional Development and Member Health Education.

At the Medical Center where the evaluation took place, there is a Member Health Education (MHE) Department under the Medical Group. It is responsible for some, but not all of the outpatient education of members. Some Medical Group clinical departments provide education independent of MHE. Patient Education in the hospital is under the Education and Training Department and is responsible for one-on-one patient education on a limited number of topics when ordered by a physician. Patient Educators are also responsible for development and/or purchase of patient teaching materials and for managing patient education programs on CCTV.

There have been a number of long term issues between the Hospital and Medical Group. Past history relevant to patient education included development of a plan by the inpatient Patient Educator for overall patient and member education without involvement of key stakeholders in the Medical Group.

THE STUDY

The decision to do the study was in large part political. Overcoming the negative results of past history, passive resistance to change, the varying viewpoints on a number of issues and administrative barriers in the Medical Group all indicated the need for objective information and involvement of all stakeholders in an objective process.

A committee structure was established to design and conduct of the evaluation. The Steering Committee, composed of the Director, Education and Training (responsible for inpatient patient education) and the MHE Administrator (responsible for outpatient patient education), two Hospital nursing managers and three Hospital Patient Educators, was responsible for the work of the evaluation. They designed and conducted the study. The Advisory Committee, composed of representatives of all the stakeholders in both Hospital and Medical Group, met twice. The first time was to review, give input/make modifications and approve the evaluation design. The second time was after the data had been collected and analyzed. They met to review the findings and preliminary recommendations, give input/make modifications and approve the final recommendations. The Steering Committee was then responsible for action planning to implement the recommendations.

The overall purpose of the study was formative: to examine the provision of and satisfaction with inpatient patient education in order to make improvements. Specifically, the evaluation addressed strengths and deficiencies in the provision of patient education, appropriateness and availability of resources, methods and materials, roles and functions of Patient Educators and Staff Nurses, delivery/teaching processes, content, quality, effectiveness and patient satisfaction.

Based on a specific framework (Jazwiec, 1984) it was decided to examine situational, input, process, product and impact aspects of patient education. Using the framework, questions were formulated for each of the areas to be addressed and instruments were developed.

Data collection involved three approaches: surveys, focus groups and document analysis. Surveys for staff nurses, nurse managers, physicians and patients were developed with some questions common to more than one survey and some questions

pertinent only to the specific group. Focus groups consisting of a systematic stratified sample of the above groups plus the Home Health nurses were asked questions designed to address the same general areas as the surveys. The focus groups were facilitated by MAE personnel from another Medical Center. Analysis of over 500 medical records was conducted to examine actual education provided to patients, use of resources and use of patient education documentation forms in relation to diagnosis, length of stay and previous admissions. Data from two existing, ongoing surveys were also included.

Data were analyzed using SPSS-PC. The Steering Committee split into two groups to analyze the findings and begin developing initial recommendations. One group analyzed employee and physician data while the other analyzed patient data. Each group presented the findings and preliminary recommendations to the other group and additional recommendations were generated.

The findings and tentative recommendations were submitted to the Advisory Committee in writing prior to the meeting to finalize recommendations. Anyone interested in patient education was also invited to participate. Following the meeting, the Steering Committee addressed the recommendations in an action plan. They are in the process of being implemented.

The entire process, excluding implementation of recommendations, took two years, with the majority of time spent on data analysis and formulation of initial recommendations.

ISSUES/LIMITATIONS

Three types of issues or limitations were encountered during the study: limitations on scientific rigor, resource/political issues and organizational events.

There were several limitations on scientific rigor. A key limitation was bias since there was no external evaluator and because one of the Steering Committee members wanted to ignore some findings. Non-representative response rates within some of the groups surveyed plus manager interference with the sampling used for the staff nurse focus group were also issues. General lack of sophistication and experience in research/evaluation design and methodology and in designing questions was also a problem. Another problem was the lack of resources to establish reliability of the instruments. Other problems encountered included loss of data from one of the three patient focus groups and changes in the resources for providing patient education as the study progressed. These changes occurred primarily during the data analysis and recommendation formulation phase. Data analysis was hampered by lack of statistical sophistication regarding how to interpret the findings.

A related issue was the need to distinguish between meaningful, useful and statistically significant results.

There were multiple resource/political issues. The study had to be conducted without additional staff or funds. The available resources were compromised by loss of one patient educator position due to budget cuts a year into the study. This limited the ability to delegate work of the study--plus rendered one or more recommendations impossible to implement. Existing work loads limited time available for the study, so many evening and weekend hours were used. Resource issues were also compounded by passive resistance, lack of commitment and/or lack of follow through by a Steering Committee member. The managers on the Steering Committee dropped out early on in the study, resulting in loss of valuable input and the bulk of the work to be handled by the remaining four Committee members. Handling input of one powerful Chief of Service that was contrary to everyone else's input on a particular issue was one political problem. Another was the Area Medical Director wanting the recommendations implemented before they had been presented to the Advisory Committee and finalized.

Organizational events were a major issue for the conduct of the study. A variety of organizational events created other priorities that diverted time and energy from the study. These events included the opening of another Kaiser hospital ten miles away that created a major drain on resources and the need to orient double the number of new staff; a major nursing management reorganization and concomitant new manager orientation and training programs; creation of a new type of health care worker and the program to train the workers; two strikes, one involving nurse and the other ancillary departments; and preparations for the tri-annual accreditation and licensure survey.

IMPLICATIONS FOR GRADUATE EDUCATION

In graduate school the practitioner learns the correct way to design and conduct research/evaluation studies. Work place limitations make it important that graduate students learn how to make modifications and still have a sound study with meaningful and useful results. The nature and purpose of the study are key considerations in determining the critical elements that must be maintained. The desire to generalize results versus non generalization should make a difference in the amount and kind of flexibility that is appropriate. How much can a method, a model, sampling techniques be modified and still be valid? Graduate students need to distinguish between statistically significant results and meaningful results. When the purpose is other than research, how much higher than .05 is it appropriate to look for useful information?

Handle bias is a key consideration. One approach is to incorporate a "devil's advocate" role or to include someone with a known different perspective on the project team. Graduate courses on research and evaluation need to include content on the political nature of research and evaluation, especially as related to the work place.

Writing a proposal for the work place is another aspect that needs to be addressed. Writing up the study findings and recommendations in a way that results in them being read by busy co-workers and administrators is a skill that needs to be learned. The rewards in an academic setting for writing a thesis or dissertation are not present in the work place. In fact proposals and reports that resemble a thesis or dissertation are likely to be left unread and ignored. A well written executive summary with recommendations attached usually will be read. Simple descriptive statistics written on the survey form with additional information attached on relationships between variables will be read by many stakeholders. In our experience, no one wanted to see the technical report, i.e., the SPSS-PC analysis.

SUMMARY

If some of these implications of the work place for research and evaluation were addressed in graduate education programs, perhaps more practitioners would attempt to do studies in their own settings.

REFERENCE

Jazwiec, R. M. (1984). **A meta analysis of evaluation models and a framework for evaluation of individual offerings in a total nursing staff development program.** (Doctoral dissertation, Northern Illinois University, 1984).

IDENTIFYING CRITICAL FACTORS OF QUALITY: PERCEPTIONS OF GRADUATE STUDENTS WHO HAVE TAKEN BOTH ON-CAMPUS AND OFF-CAMPUS CREDIT CLASSES AT FOUR-YEAR INSTITUTIONS

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ABSTRACT: This two-year study reveals critical factors of quality which have been identified by graduate students who have taken both on-campus and off-campus credit classes as part of their degree program at four-year institutions. Randomly selected students from four public institutions in the state of Illinois, each representing a different governance system, responded to a twenty-question survey, comparing their on-campus and off-campus credit class experiences. In addition, the graduate students were asked to assign a level of relevancy to each item regarding the item's effect on the quality of the educational experience. The final section of the survey asked the students to identify and rank critical factors of quality for on-campus and off-campus credit classes. The seven critical factors identified for on-campus revealed a nearly seventy percent commonality with those critical factors identified for off-campus. Instructor expertise was ranked highest in both lists. The seven critical factors will provide insights for those administrators and deliverers of both on-campus and off-campus credit classes as they attempt to defend and implement comparable educational experiences for graduate students at public institutions.

INTRODUCTION

The quality of off-campus credit classes is of major concern to all stakeholders in higher education: administrators, faculty, students, and state-wide or regional governing boards. Many administrators in higher education institutions claim the quality of off-campus classes is less than that of those taught on-campus (Stauffer, 1981). Quality assurance grows out of a need to establish accountability and program worth in "research-oriented institutions, where issues of quality and mission related to off-campus degree programming are frequently raised by faculty, department heads, and deans" (Schroeder and Donaldson, 1990). It is the contention of K. Patricia Cross that "many educators and policy makers are calling for new forms of quality assessment of programs designed to serve the unique needs of adults. The question 'what is quality?' appears to be straightforward and objective when in fact it is neither" (1984).

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This research has focused on the critical factors of quality as identified by graduate students who have taken both on-campus and off-campus credit classes as they pursued their graduate degrees. What do they identify as being relevant to quality? What are the dimensions of quality which are influenced by the location of the class, i.e., where the class is taken (on-campus or off-campus). If, as Daniel Seymour has stated (1989), quality is a state of mind, a vision of the overall commitment by colleges and universities to provide educational experiences which extend beyond the classroom to the students' lives, it is essential that these students be given the opportunity to share their insights. This research surveyed graduate students, believing that they would reveal the critical factors administrators and deliverers of off-campus credit classes need to understand in order to provide comparable educational opportunities for both on-campus and off-campus students.

BACKGROUND

The question of quality in higher education continues to be debated (Schroeder and Donaldson, 1990; Hutchings and Marchese, 1990). Studies examining the assessment of quality in higher education, and more specifically addressing the issue of the quality of on-campus versus ("as compared to") off-campus credit classes, have only served to reinforce the need to delve into the perceptions of those most affected by the issue. It is the students who have taken both off-campus and on-campus credit classes whose perceptions need to be explored (Clark, et. al. 1984; Votruba, 1974; Spikes, 1978; Klocke, 1978; Campbell, 1982; Lewis, 1984).

Public universities must answer to the general public, state agencies, and other institutions when they make the decision to take credit classes off campus. In a national study on solutions of accreditation for nontraditional postsecondary education, questions were raised about comparability ("Are the programs beyond the main campus as good as those on campus?") and assessment ("How is quality monitored?") (Thrash, 1979). Part of the North Central Association's Commission on Off-Campus Programs response to these questions was to formulate fifteen questions which would provide the North Central Association of Colleges and Schools with guidelines for institutions offering or considering offering off-campus programs.

In moving conventional academic programs off-campus, those who design and deliver academic programs off-campus must learn to work cooperatively to move the academic experience (whole degree programs) to an off-campus setting while upholding the integrity of the institution. Lynd and Powell (1981) underscore the conviction that there should not be a double standard in any aspect of education activity at an institution. They argue that "off-campus activities should evolve from the on-campus programmatic strengths and academic expertise of the institution." Votruba (1979) advances the arguement that on-campus and off-campu credit programs have the responsibility of being comparable. While comparability does imply

comparing one with another, it is important to note that each program can have distinctive characteristics while maintaining comparable standards and criteria which lead to quality. Theodore Campbell (1982) feels that the responsibility for maintaining academic quality must be shared by both the institution's extension (off-campus) division and the on-campus university staff if comparability is to be the goal.

A few studies have attempted to compare on-campus and off-campus credit programming. The methods used in the past have not, by and large, been holistic; that is, they have been predominantly quantitative measures of satisfaction. Studies which attempted to address the students' perspectives looked at satisfaction with the quality of instruction (Central Connecticut State College, 1980), student performance in off-campus programs (Walsh, Novick and Andrechak, 1979), quality of learning experiences (Stephenson, 1980), and specifically off-campus graduate instruction (Klocke, 1978). Klocke's study attempted to distinguish between off-campus instruction and evening class instruction. A factor that may have affected the results of his study, according to Klocke, centered around the question of "quality versus convenience." Those enrolled in off-campus credit classes revealed that convenience may indeed influence their perceptions of quality of the program. This was later supported in the data published by the College Board (Aslanian and Brickell, 1988) in which students in transition reported they looked at location before type of program, cost, and quality. Aslanian and Brickell found that "quality cannot override other reasons. A distant, expensive, liberal arts program of extremely high quality cannot compete with a nearby, inexpensive, career program."

Two studies which have direct bearing on this research are the work of Spikes (1976) and Lewis (1984). Spikes' studied the perceptions of selected faculty and students at Northern Illinois University and discovered that a significant differecne (at the .05 level) was found between the total overall responses of the on-campus and off-campus studnets regarding the quality of on-campus and off-campus classes. On-campus classes were perceived as being of significantly higher quality than were off-campus classes. Interestingly, faculty perceived no significant differences in the quality of on-campus and off-campus credit classes.

A study conducted at the University of Southern Mississippi by William Lewis (1984) had quite different results. Lewis' research let him to state that "the major results...indicated that there was no significant difference in graduates' perceptions of instructional quality of on-campus and their perceptions of off-campus classes."

This study has had the backing and interest of many administrators and educators in the state of Illinois. The Illinois Council on Continuing Higher Education requested the study and has followed the progress with expectations that the findings will generate new understandings of the stakeholders' (the students) perceptions of

quality for both on-campus and off-campus credit programs. Three concurrent studies (public universities, private colleges and universities, and community colleges) will provide a wide data base for future directions for off-campus credit programming.

METHODOLOGY

The hypotheses tested were the following:

H_1: There is no significant difference in degree of reported presence of instructional dimensions between on-campus classes and off-campus classes as perceived by those who are currently enrolled in graduate classes or who have completed their graduate degree. The additional variables of age, sex, discipline do not interact with location.

H_2: a) For the on-campus classes, there is no difference in perceptions of those who are currently enrolled or have completed their graduate degree by age, sex, discipline or G.P.A.

b) Similarly, there is no difference in perceptions of off-campus classes by those who are currently enrolled or have completed their graduate degree by age, sex, discipline or G.P.A.

H_3: There is no significant difference in perceptions of relevancy to quality of those who are currently enrolled or have completed their graduate degree by age, sex, discipline, or G.P.A.

H_4: There is no significant difference between rankings of critical factors of quality for on-campus and off-campus classes and the factors identified as having relevancy to the quality of classes.

Hypotheses H_1, H_2 (a and b), and H_3 were tested for significance at the .10 level ($p = .10$). H_4 was tested for correlation between on-campus and off-campus, on-campus and relevancy, and off-campus and relevancy using Spearman's rho.

The research was divided into two phases. Phase I concentrated on content validation of a survey instrument developed by Lewis (1984). Through interviews with graduate students, faculty, and administrators at two public institutions, the items in the survey were critiqued and slightly altered. Two pilot studies were conducted with graduate students at Northern Illinois University and conference attendees at the Illinois Council for Continuing Higher Education Conference in February 1991.

Phase II of the research involved the selection of four institutions of higher education in Illinois who represent the major governing bodies within the state. The deans of continuing education at each institution provided names and addresses of graduate students who met the following criteria: those who have

completed their masters degree (in any discipline) within the time frame of 1988 to 1990 and who have taken both on campus and off-campus credit classes and those who are currently pursuing their graduate degree (in any discipline) and have taken both on-campus and off-campus credit classes. From the lists provided, a random sample of 100 students at each institution were sent a cover letter and the survey. After several weeks, the response rate was less than 25%, and a second set of randomly selected names were sent the survey. The second attempt yielded a similar response rate. One of the major problems that surfaced was that institutions do not clearly designate off-campus from on-campus credit classes and the lists contained names of those who did not meet the criteria of having taken both on-campus and off-campus classes.

FINDINGS

The following table indicates the results H_4 when tested for the three combinations of relevancy and on-campus, relevancy and off-campus, and off-campus and on-campus.

	Relevancy	On-Campus	Off-Campus
Relevancy	----------	p2=.1849	p^2=.26
On-Campus	----------	---------	p^2=.624
Off-Campus	----------	---------	----------

Correlation: H_4

The factor GENDER showed a significant difference off-campus on question 12 which stated that "as a student, I was always prepared for my classes," with N=148 and p=0.069. The factor AGE revealed significant differences with twelve of the questions when students compared the item to relevancy for overall quality (H_3). The factor DISCIPLINE showed signficant differences in each of the first three hypotheses. The factor GPA also showed some significant differences in each of the hypotheses. The data is available upon request for each of the factors but is too lengthy to include in this paper.

The critical factors of quality in credit class experiences as identified by graduate students revealed a 62% shared commonality (p^2=.624). The following chart shows the strong correlation very succinctly.

CRITICAL FACTORS

	On-Campus	Off-Campus
#1	INSTRUCTOR EXPERTISE (Instructor knowledge, expertise, competency, teacher)	INSTRUCTOR EXPERTISE (instructor knowledge, expertise, competency, teacher)

#2	CURRICULUM RELEVANCE (relevance, relevancy, subject matter, content, curriculum, professional growth)	#2	PHYSICAL PARAMETERS (class size, time, appropriate work, location, clarity of lessons, professional growth)
#3	ADULT LEARNING ENVIRONMENT (concern, interest, students, understanding, respect, approachability, communication, expectations)	#3	CURRICULUM RELEVANCE (relevance, relevancy, subject matter, content, curriculum, professional growth)
#4	PHYSICAL PARAMETERS (class size, time, appropriate work, location, clarity of lessons, convenience, environment)	#4	ADULT LEARNING ENVIRONMENT (concern, interest, students, understanding, respect, approachability, communication, expectations)
#5	RESOURCE MATERIALS (library, AV materials, materials, text)	#5	INSTRUCTOR ENTHUSIASM (instructor enthusiasm)
#6	INSTRUCTOR ENTHUSIASM (instructor enthusiasm)	#6	RESOURCE MATERIALS (library, AV materials, materials, text)
#7	INSTRUCTIONAL METHODOLOGY (methods, presentation, discussion, ideas, objectives)	#7	INSTRUCTIONAL METHODOLOGY (methods, presentation, discussion, ideas, objectives)

CONCLUSIONS/IMPLICATIONS

The problem of identifying the population who met the criteria of having taken both on-campus and off-campus credit classes certainly impeded the progress, and perhaps, the knowledge to be gained. Nevertheless, administrators and delivers of both on-campus and off-campus credit classes now have empirical data to support the continuation of programming at off-campus locations. The graduate students have said that the quality of their education experiences has not been greatly affected by where the class was taught but rather was impacted by other variables such as resources, teacher expertise, and applicability to their professional growth. The critical factors identified by the graduate students certainly will provide educators with insights as to what adult learners are anticipating when they pursue advanced degrees. They clearly expect teachers to have expertise, to respect them (the students) as competent adults, and to make credit class content relevant and meaningful, regardless of the setting in which the class takes place.

PUTTING BEHAVIOR IN PERFORMANCE GOALS

Harlan C. Lynn[1]

ABSTRACT

Teachers of radio and television performance too often "help" their students by providing descriptive suggestions as to how a presentation should sound and look. Instead, this paper recommends teachers provide prescriptive procedures for a student to follow to obtain the desired results in a performance. Using a descriptive approach in preparation for performance, places the teacher in the position of having to say "no" to an approach that the performer has offered. For example, students are told to slow down because they are talking too fast. As a result of this sort of direction, students are able to slow their presentations, but often their performances now have the added message that each student is trying to speak slowly. Furthermore, the directive descriptive approach runs the risk of undercutting the authority of the students. The teacher knows best and the students try to meet the descriptive expectations of the instructor. But the instruction has clearly invaded the process, and the students are now less in charge of their own performances.

In the prescriptive approach to performance, the instructor would *not* talk about rate of delivery, but would suggest a behavior that — if integrated into the performance — would have the effect of slowing the delivery rate. For example, if the student were leaving sounds out of words, an instructor would more appropriately work on establishing or replacing these sounds in the student's speech. As the missing sounds are added, the rate of delivery will slow because time is required to produce the new or returned sounds.

Research shows that 35-90 percent of the meaning students give performances is carried by nonverbally. Further research is needed to develop a science-based vocabulary and methodolgy to better develop the nonverbal pubic performance skills of students. Instructors and students need these findings in order to approach performance preparation prescriptively. Teachers of performance, if they have not already done so, need to adopt the critique mode that assures the learning process will be a positive experience for students — rather than a "noing" one. This nurturing attitude will go far in helping to develop the confidence and assurance that students need to be effective in public presentations.

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PUTTING BEHAVIOR IN PERFORMANCE GOALS

Harlan C. Lynn[1]

Teachers of radio and television performance courses must provide the steps to help students effectively present themselves and their messages. However, the literature of the field provides descriptive suggestions as to how the final presentations should sound and look, but does not often provide prescriptive procedures for a person to follow to obtain the desired performance results. For example, the National Association of Broadcasters (NAB) in their *If You Want Air Time...* suggests that an effective performer will speak naturally, avoid thick regional accents, avoid a monotone voice, project genuine enthusiasm and warmth, be friendly, not fidget, etc. (Levey, 1983, pp. 22-23) These all appear to be helpful suggestions, but no advice is given as to how to accomplish any of these desired ends. As soon as a would be effective performer asks, "How do I go about being natural or enthusiastic?" It becomes clear that the NAB suggestions are a list of descriptions of what they think performances should sound and look like. If a person does not already know how to be "natural" or "enthusiastic," the list of suggestions will be of little help in becoming a natural, enthusiastic performer. At this point, both teacher and student of radio and television performance would welcome prescriptive procedures that would develop the desired natural and enthusiastic behavior. The descriptive approach to performance preparation is not unique to the NAB. It is shared by many sources as they address the performance concerns of vocal and nonverbal behavior.

DISCUSSION

NONVERBAL COMMUNICATION

This focus of concern on vocal and nonverbal behavior in the literature is correct. Mehrabian (1968) found that the total impact of a spoken message was composed of 7 percent verbal, 38 percent vocal, and 55 percent facial. (p. 53) It is this 93 percent of a message that is at issue when consideration of vocal and nonverbal realms of communication is undertaken. Kendon (1983) lends strength to the importance of bodily movement in the communication process when he reports that gesticulation is an integral part of an individual's communication effort. (p. 27) He finds such movement to be an index of a speaker's psychological state and is combined with speech to form an utterance unit. (p. 27)

Clearly it is impossible to produce speech without bodily movement being involved, but human behavior is of such complexity that orderly study of nonverbal behavior becomes a sizable challenge.

Harrison and Wiemann (1983) help to bring order to the study of nonverbal messages by placing them in four categories.

1. Messages of the body that are produced by the appearance or movement of the human form. (p. 273)
2. Messages of artifact, produced by creating, arranging, or displaying objects ranging from personal dress to public monuments. (p. 273)
3. Messages of space and time. (p. 274)

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4. Messages of the media. (p. 274)

These four categories provide but one structure in which the study of what is being done in the nonverbal realm can be sorted and examined to learn what nonverbally has transpired and what can be replicated to produce a given communication effect. Friedman (1979) pointed out two hopeful trends in the study of nonverbal communication.

1. Increasing attention to nonverbal communication skills shifts the perspective from cognitive and informational aspects of social interaction toward the affective component. (p. 3)
2. Research on nonverbal communication as a skill directs attention away from motives and traits and toward abilities as explanatory constructs in analyzing social behavior. (p. 3)

It is the division of the nonverbal communication elements from all of nonverbal behavior that is a major challenge for teachers and students of performance. For it is the selection of the meaningful behavior and the development of the skills to be able to call upon this repertoire of nonverbal communication options that is the goal of such education. However, progress in this arena is slow.

STATE OF RESEARCH

Kendon (1983) in writing about the use of gestures in performance saw little prescriptively in place to be used. "Investigation to date provides but hints and snatches of the communication role of gestures" (p. 27).

The present need for educationally sound approaches to developing nonverbal skills is clear. Cordoni (1987) writes,

> As children grow, they are expected to learn behavioral and verbal skills. They are expected to know what to say to whom. Body language, facial expression, and social gestures must be understood in order for an individual to find his place in a social world. Unfortunately, although these are skills we all must learn, they are rarely consciously taught. (p. 6)

Those who teach radio and television performance must confront this institutionalized nonverbal illiteracy and, to a lesser degree, verbal ineptitude. We want confident presenters. But, to date, educators and performers have succeeded in elevating the fear of public performance to a realm above the fear of death. Consequently, we have produced several generations of public-performance avoiders — well schooled in how to fail with little idea of how to succeed.

LEARNING CONTEXT

If we are to turn this trend toward the development of confident, effective presenters who enjoy public performance, a learning context must be established that nurtures the skills of performance. Masterman (1980) would methodologically place studies of radio and television at odds with accepted educational practice in the United States. Today's systems of evaluation often impede learning.

> *There should be as little competition, grading and examination as possible*, and when these devices are used they should always have as their prime purpose the facilitation of the pupil's own learning and self-evaluation. It might be possible to replace alienated learning by real learning: (i) if *pupils* can come to see tasks as relevant ends in themselves rather than ways of achieving marks; and (ii) if *teachers* can place the development of the mind of the

individual, rather than the depositing of subject material, at the center of the educational experience. (Masterman, 1980, pp. 27-28)

The individualizing of learning is one of the major challenges in the development of performance skills. Few courses of study remind us so graphically that each student is unique and different with varying needs as does the study of human performance. Here the competition, if there is any, is with the past performance of an individual and whether or not that person is able to improve the effectiveness of their communication efforts. In such study, it becomes appropriate to develop student specific behavioral objectives to guide and evaluate the learning process.

BEHAVIORAL OBJECTIVES

Mager (1962) in his *Preparing Instructional Objectives* sets a helpful context for the development of objectives by defining three terms.

Behavior.....refers to any visible activity displayed by a learner.
Terminal behavior.....refers to the behavior you would like your learner to be able to demonstrate at the time your influence over him or her ends.
Criterion.....is a standard or test by which terminal behavior is evaluated. (p. 2)

Mager suggests three steps in the writing of objectives that will describe the desired behavior of a learner. First would be the identification of the terminal behavior by name. (p. 12) In the teaching of performance, it is important to specify the kind of behavior that will be accepted as evidence that the objective has been achieved. For example, rather than assuming that a well informed person will speak naturally (Levey, 1983, p. 22), it would be better to specify that such a person would be perceived as having an energized conversation with the host of the program. No one would select to speak unnaturally unless it were for some designed effect. It must be kept in mind that being interviewed on radio or television is not something that one naturally does. This is behavior invented and developed by man. Therefore, energized conversation would be a better way of describing the terminal behavior.

Second, the desired behavior should be further defined by describing the important conditions under which the behavior will be expected to occur. (Mager, 1962, p. 12) Here, the interview would take place in a studio with the participants sitting in chairs close to one another. A setting conducive to conversation that could be easily replicated by the interviewee to practice for the interview. Great detail could be used here, but, for most developing performers, it is best to select several specific behaviors to accomplish during each performance.

Third, the criteria of performance must be described including how well the learner must perform to be considered acceptable. (Mager, 1962, p. 12) The participants in the interview would be responsive to one another as demonstrated by sustained periods of eye contact, interactive nonverbal activity such as the nodding of the heads, physically orienting the body in the chair to give equal value to the participant of the interview and the use of one or more well timed gestures in support of the message being delivered. Important here is the selection of several behaviors from all the possible behaviors that the interviewee will prepare to use during the interview. Those selected should be major, observable concerns in the nonverbal and verbal realms.

All three steps may not be needed for every performance objective. Many objectives will be shared by all performers, so the individualization should not become an impossible task.

The major emphasis in such learning is to keep the behavioral adjustments manageable and positive.

IMPORTANCE OF NOT "NOING"

We are all provided with more, "Don't do that," "Sit still," "Don't slouch," "Don't talk with your hands," "Don't mumble," "No...," in our educational and socialization process than we are given positive instruction in alternative procedures that would result in our being more effective persons and communicators. The result of all these no messages is that we tend to do less when it comes to public performance than we should. We tend to be less interesting, less enthusiastic, and generally unwilling to take communication chances.

We know what not to do better than we know what to do. We do not want to risk making fools of ourselves in public. Minding the nos keeps us so busy we do not have time to explore and learn what we should be doing. If we accept and practice all these nos and if we are fortunate, we will only be perceived as well informed, but dull adults who are average and adequate to the task at hand. Most of us will turn as much of life as possible into a spectator experience where we will risk the minimum amount of exposure. "Better safe than sorry," becomes the motto when it comes to public communication opportunities. And this means that little or no communication that could contribute to the improvement and fun of the human condition. The opportunity for sharing of the unique products of human minds as they engage in effective communication is damaged and often lost. The noing, even if well meaning, teacher has no place in the learning process!

CRITIQUE SKILLS OF PERFORMANCE TEACHERS

Teachers of performance need a high order of critique skills to relate to the needs of their students. The radio-television performance practitioner needs a positive approach to student development that results in confident performers and not the "turn off" most students experience today. It is the task of instructors in performance to "consciously" teach the skills of verbal and nonverbal language that can be effectively used in electronic channels. Modifying Masterman (1980), this teaching role differs from most other instructional approaches in two ways.

First , a major goal in the study of electronic delivery channels is to develop in the student an understanding and competence in the use of the conventions and practices employed to disseminate information on radio and television. The student will not only come to know what *should* be done, but will be *capable* of doing what needs to be done to effect a given end.

Second, what is to be learned and how it is evaluated needs to be a matter of dialogue between student and teacher because we are talking about truly individualized instruction. Each student is a unique instrument being trained and refined in the education process. Therefore, each student's curriculum must be the synthesis of the student and instructor working together. The relationship becomes that of a senior colleague working with a junior colleague, rather than as an expert who will make all decisions. It is this nurturing
collaboration that will produce the prescriptive behaviors on which the student will concentrate to improve their performance.

PRESCRIPTIVE APPROACH

Students and teachers of performance will have to work their way through the great preponderance of descriptive material available to them in the current literature to develop the practice of prescriptive behavioral goals. For example, developing performers are frequently told by developing teachers to "slow down" so that the audience can understand them. Such a direction

assumes the presenter selected the fast rate of delivery so the audience would *not* understand. In most cases, this is not true, and the presenter is usually not making a conscious decision to speak at a rate -- fast or slow -- with or without understanding. It just happened.

A prescriptive approach would give the presenter a task to do that would result in slower speech and the possibility of improved audience understanding. For example, the presenter could be told to give meaningful value to the words that he or she is producing. Are the words being sounded with little or no indication of what they mean? Give expression to the intent of the thoughts that motivated the selection of the words in the first place and the presentation will be slower because it takes more time to verbalize the *meaning* of a word rather than the word alone. If sounds are being left out of the words, such as the substitution of *n* for *ing*, help the presenter learn to produce *ing*. Put it into the presentation and the speaking will be *perceived* as being slower.

CONCLUSIONS AND RECOMMENDATIONS

RESEARCH NEEDED

Research is needed to develop a science based vocabulary and methodology to better develop the public performance skills of students. We have developed a vocabulary for learning to dress for success. We have not been so successful in developing a vocabulary of gestures of the left hand, facial expressions, and body language — the entire realm of nonverbal communication. It represents 35 to 90 percent of the communications of meaning. (Busby, 1987, p. 61) The parameters of the nonverbal vocabulary need to be explored and codified.

EDUCATIONAL METHODOLOGIES NEED TO CHANGE

We teachers of performance need the vocabulary and its methodology, for it will make it possible to place us in the critique mode, rather than the criticism mode. We need to be able to provide prescriptions, rather than judgements. Websters (1961) defines *critique* as, "The art of evaluating or analyzing with knowledge and propriety works of art or literature the first principle of which is to consider the nature of the piece and the intent of its author." (p. 539) We are yet to equip our teachers with the knowledge and skills that will guarantee that instruction in public performance will be a constructive process for their students. Clearly new approaches are needed that do not center on the elimination of inappropriate behavior, but that prescribe new behavior that produces the desired effect. When today's students, steeped in criticism, can look at themselves as an object and provide a critique that reflects the attitude, "I'm better than I thought I was, and I know how to make myself even better," we will have a constructive educational approach in hand.

LITERATURE CITED

Busby, R. E. & Majors, R. E. (1987). Basic speech communication: principles and practices. New York: Harper & Row, Publishers, p.61.

Cordoni, B. (1987). Living with a learning disability. Carbondale: Southern Illinois University Press. p. 6.

Friedman, H. S. (1979) The concept of skill in nonverbal communication: implications for understanding social interaction, In R. Rosenthal (Ed.), Skill in nonverbal communication individual differences. (p.3). Cambridge: Oelgeschlager, Gunn & Hain, Publishers, Inc.

Harrison, R. P..& Wiemann, J. M. (1983) The nonverbal domain. In J. M. Weimann & R. P. Harrison (Ed.), Nonverbal interaction. (pp. 273-274). Beverly Hills: Sage Publications.

Kendon, A. (1983).Gesture and speech. In J. M Wiemann & R. P. Harrison (Ed.), Nonverbal interaction (p. 27). Beverly Hills: Sage Publications.

Levey, J. F. (1983). If you want air time. National Association of Broadcasters, pp. 22-23.

Mager, R. F. (1962) Preparing instructional objectives. Palo Alto: Fearon Publishers. pp. 2 & 12.

Masterman, L. (1980). Teaching about television. London: The Macmillan Press, Ltd. pp. 27-28.

Mehrabian, A. (1968). Communication without words. Psycology Today, 2(4), 53.

REACHING FOR THE FUTURE: REFLECTING ON THE FORCE OF COMMUNITY VISION

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ABSTRACT: Vision creation is in vogue, but what is it? And, does it really work for broad-based community direction setting? An analysis of 15 community vision statements found that all citizens want improvement in the basic features of community life, but there are substantial differences in the degree of improvement desired, evidence needed toward the desired future, and treatment of local attitudes.

INTRODUCTION

Communities, like people, need to be stretched to reach beyond their current situation to achieve an improved future. Community vision development, a stretching as well as a direction-setting process, is being purported as an essential requirement, not merely an option for communities of the twenty-first Century. But, what is it? And does it really work?

Variations exist, but typically, community vision creating is the process of a defined community purposefully creating or inventing its future in alternative ways (scenarios) or in desirable forms (visions), with the intention of acting on the images to shape the community's long-term direction and future. While less positivistic than needs assessment, economic analysis, or other development strategies, many in community education, community development (Zeigler, 1985; Wade, 1989), futures studies, and change-agent (Textor, 1979; Barker, 1990) literature espouse the need for, and the power of vision creation in community-based educational programming. However, documentation of the implementation of vision creating done on a sustained basis is missing. This paper reflects on one particular component of the vision-creation process derived from the development of community visions over a four-year period in diverse types of communities through a state-wide, university-directed, community self-renewal program. Specifically, characteristics of 15 community vision statements are analyzed and overall conclusions offered.

THE *PROJECT FUTURE* APPROACH

In 1987, the University of Minnesota Extension Service launched a four-phase, long-term community development program entitled, *Project Future*, which focused around the creation of twenty-year community visions. At least fifty percent of the community's residents were expected to get involved in the vision creation. "What do you really want your community to be in twenty years (2010)?" was the question that participants in the community engagement phase of the project were expected to respond to, along with assessments of trends and strengths and weaknesses of the community as it existed.

The responses could be open-ended and relate to any part of the community. Furthermore, they need not be "practical" or fit into neat categories. This open-ended collection of suggestions, which typically

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included input from students in grades 7 through 12, was analyzed and used to describe a vision of the community in the year 2010. This two to three page document was then given back to the community at public meetings for discussion, debate, and eventual adoption. Once adopted, the vision became the basis for long and short range action projects as well as additional planning to scope out major community changes. It was desired that the project committee of citizens overseeing the development of the vision would emerge into a permanent organization, which would continue to organize vision-related action projects, update the vision periodically, and continue to recruit citizen participants.

Throughout the process, the Minnesota Extension Service staff guided development of the vision and sought University of Minnesota faculty resources who could be of assistance in action projects. Over forty Minnesota communities are currently involved in the program.

SYNTHESIZING COMMUNITY ENGAGEMENT RESULTS INTO A COMMUNITY VISION STATEMENT

The results of a community engagement process typically include:

- listings of what participants have identified as current changes, trends, and community problems
- listings of the strengths and weakness of the community
- suggestions for the "Community of the Future - 2010" stated in alternate ways
- open-ended comments from individuals, organizations, and summary comments from the meeting facilitators
- observations from engagement facilitators about the nature of engagement discussions, and how participants were viewing the future

This is the raw material from which community vision is constituted. It may consist of many meeting summaries and questionnaires. The organization of this material can be done in several ways: Ideally, these suggestions will be compiled (in their original wording wherever possible) into categories that cause vision planners to think broadly about the nature of the community. For example, categories such as, community life style, community distinctiveness, quality of life, differences from today, civic attitudes, community volunteerism, and people relationships", all force thinking by vision developers across the economic, social, physical, educational, and governmental service features of the community. There is a danger at this point of conveniently classifying suggestions into such generic categories as economic development, education, natural resources, and public facilities, which is the way that planners and service administrators would tend to view these suggestions. Often, when this done, the original wording emphasis of suggestions, and full understanding is lost.

Once the engagement material has been so organized, a series of vision-shaping questions can be posed to the committee or individuals undertaking the writing of the visions:

- What suggested features of the community of 2010 appear to have the most consensus?
- What community trends should be continued, and what should be altered?

- What current and/or past community strengths should be continued or expanded in the community of the future?

- What current community weaknesses definitely need to be corrected?

- What suggested new community features would make a major difference in the community, and possibly form the catalyst for other improvements?

- What else has to happen in the community, particularly in attitudinal adjustment, for these changes to come about? Should these needs also be noted in the vision?

- What desired community features are contradictory and cannot exist together? How will a choice be made?

- What overall theme exists in the responses and suggestions of engagement participants?

- Is it necessary to suggest startling changes in the community to jolt the community into action?

- Are reassurance statements needed in the vision to calm resident fears that today's positive community features will not be eliminated?

- What statements in the vision should be crafted to show youths that the community does have a future?

From the discussion generated by these key questions, a project committee produces two to three page vision statement for submission during public meetings to the community involved.

VISION DIFFERENCES - DEGREES OF IMPROVEMENT

Do community vision statements substantially differ even though a similar development process has been followed? A content analysis of the initial fifteen vision statements indicated that they have similarities, in that citizens want improvement in their basic features of community life, but there are substantial differences in the degree of improvement desired in the future community (at least as expressed in the vision statement).

An important difference in the vision statements is how adventuresome or cautious communities will be in stating the positive changes they desire. It should not be forgotten that all vision statements are positive in tone, but degree is determined by three factors:

1. What did the actual community engagement suggestions for the "community of the future" really say?

2. How does the vision-writing committee interpret engagement results, and what the community would "buy" in positive wording?

3. What does the community actually accept in the form of community vision at public meetings?

The key determiner in this process is the project and vision-writing committee's best judgement (if different) as to community response to positive assertions about the capacity of the community to improve

itself, and how such statements should be worded to generate discussion and acceptance. It could be argued that the communities might be open to accept stronger or more aggressively worded vision statements than submitted by the committees. However, the vision must be developed and sold within the community by community people. For example, two of the vision crafting challenges experienced by vision-writing committees involved the degree to which they were willing to say that the community was going to increase in population, and whether drug-free status, a priority in most *Project Future* communities, would be achieved.

VISION DIFFERENCES: EVIDENCE TOWARD DESIRED FUTURE

Another vision-shaping question posed to vision-writing committees was "Do you need to present evidence as to how the community moved from its current level to its desirable state in the year 2010?" This was considered important in some communities and unnecessary in others. An example of vision language containing more specific improvement detail can be found in the *Fulda* community vision: "The small business incubator set up in the 1990's has provided start-up for several retail businesses. As a result of the business incubator, CompuTech Industries employs fifty people." City of Fulda, Minnesota.

Including such specifics may make the vision more immediately attainable, but it may also limit thinking about how to achieve the overall direction of the vision. Non-attainment of specific projects mentioned in the vision by the target date may generate credibility problems for the vision as well. Each *Project Future* committee sorted this issue out for themselves within the vision-crafting process.

VISION DIFFERENCES: TREATMENT OF ATTITUDES

Vision development committees were also challenged to not only develop visions that described services, lifestyles, physical facilities, and educational systems in community visions for the year 2010, but also to identify the attitudes and behaviors that would be needed to bring about the community of the future. Some of these attitudes were suggested during the engagement process within the vision by asking such questions, as "What type of community attitudes will be necessary for this feature to come about?"

Project Future vision-writing committees differed in how they worked with community attitudes in the vision. Some saw attitudinal change as essential for anything to happen, while others felt that the visions needed to contain attention getting and needed additions to the community that could motivate community leaders and residents to act, and thereby bring about a change in attitudes.

THE FORCE AND POWER OF VISIONS IN COMMUNITY DEVELOPMENT

Through analyzing the vision-creating process and in working with communities in activating the community visions, the following summary statements can be made from the Minnesota Project Future Experience:

1. The community vision process provides a way to discuss everything that relates to the community from a user perspective and the interrelationships of community features.

2. A vision-development process invites youth to participate in creation and follow-up actions. The community vision can also be a useful part of school curriculum, beginning in elementary grades.

3. A vision-development process can generate widespread participation in the process, and understanding of the vision by the entire community.

4. A vision can be used as helpful leverage to cause reflection upon, or re-examination of, decisions by

many community organizations, including government. It allows a less threatening way of questioning priorities ("...this is how your actions are affecting the 2010 community vision.") than merely objecting to certain actions.

5. A vision-development process has the potential to contribute to not only an examination of community but a recommitment to it by citizens concerned about its future. For some communities, this may be the most immediate beneficial effect.

6. A vision, like other planning documents, has a short shelf life unless it is activated by efforts to bring it about.

7. A community vision will lose force if it doesn't lead to addressing major community challenges and problems. If mostly short-term projects (that probably would have happened anyway) are the sole action stage outcome, then the vision development process may not have been worth doing.

8. Vision development can be a vehicle for the sponsoring organizations' individual and institutional development.

9. If adult educators perceive their role as information disseminators, they will have difficulty "working" with the future. The nature of facilating futures-focused thinking requires considerable interaction with people, trends, ideas, and "what if" type thinking.

After four years of program implementation, several basic questions continued to persist. Some of those being: Is vision-based community development superior to other approaches in attracting citizens to ongoing community improvement activities? Does the vision-creating process work better in communities of certain cultural heritage? And, to what extent are adult educators skilled in doing this type of practice and applied futures research?

Both the knowledge of the process used in vision development and the content of the vision statement and subsequent actions is useful to educators involved in community-based change. It is understanding the above learning, however, that will further both the theory and practice of facilitating empowered citizens who, in turn, will develop and maintain an unlimited desirable community.

REFERENCES CITED

Barker, J. A. (1990). *The power of vision: Discovering the future.* Burnville, MN: Charthouse Learning Corporation.

Textor, R. B. (1979). Ethnographic futures research and its educational potential. *Educational Futures: Sourcebook I.*

Wade, J. (1989). Felt needs and anticipatory needs: Reformulation of a Basic Community Development Principle. *Journal of the Community Development Society*, 20, 116-123.

Ziegler, W. (1985). *A mindbook for the community envisionary.* Denver, CO: The Future Invention Associates.

CONDUCTING EVALUATION IN ADULT LITERACY PROGRAMS: ISSUES AND RECOMMENDATIONS

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ABSTRACT. Adult literacy programs are increasingly being required to provide "hard data" and document success. Use of standardized tests, instruments normed on children, and measures of grade level equivalent are all controversial issues within the adult literacy field. Using the Technology for Literacy Project as a model for literacy evaluation, an overview is provided of current evaluation needs and issues in adult literacy instruction. The perspective given is that of a practitioner, rather than an evaluator, and concludes that current efforts to identify assessment techniques that account for diversity and individualization in learners and program design are promising developments.

INTRODUCTION

Evaluation and literacy make uneasy bedfellows. Coretta Scott King in her keynote address to the International Reading Association decried "literacy tests" and their use in keeping Blacks from voting in the South. One is inclined to believe that discrimination of that type is a thing of the past, but an adult literacy teacher recently was told by one of her students that he couldn't vote in St. Paul because he couldn't read. This was in 1990. Literacy teachers and tutors vicariously experience the discrimination that has accompanied any form of testing of their students. For example in North Carolina in 1983, a person had to flunk a written driver's license test three times before he was permitted to take an oral one. Evaluation, testing, and assessment of any type have been barriers keeping learners out of programs, out of jobs, and out of the mainstream. Is it any wonder that literacy providers are reluctant to place their learners in any situation that might result in a repeat of their prior experiences of failure and despair? Literacy providers have come to share with learners a fear of anything that appears to set limits because they have seen the learners' potential and seek to nurture its development.

ISSUES IN CONDUCTING EVALUATION

Aside from the philosophical and historical reluctance to engage in evaluation there are methodological problems specific to adult literacy which practitioners know far better than researchers. Larry Mikuleky, noted reading researcher, has described his first experience in adult basic education as startling. Beginning with a sample of 100 subjects, he ended six months later with an N of 0! In a presentation on adult literacy research, Mikuleky stated that he never before lost an entire sample. The high attrition and turnover rate with which most literacy programs are plagued creates research conditions akin to those in a shopping mall or airport. It is no coincidence that the majority of research in adult literacy has been conducted in the military or corrections; captive populations make the best subjects. Where learners arrive of their own volition, as is the case in volunteer literacy programs, community-based programs, and most adult basic education programs, the issue of retaining learners long enough to provide meaningful data for evaluation is a much discussed problem. In an Evaluation Study of Program Effectiveness (1990) conducted by Literacy Volunteers of America this frustration is apparent when only 341 learners (36%) of the 953 learners had pre- and post-test scores. The report states, "it is difficult to know how strongly any findings may be interpreted and generalized, when so much data are missing." Darkenwald (1986) writes, "In general, the participation/dropout research on ABE

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unsophisticated, methodologically flawed, and devoid of theoretical frameworks to provide a basis for prediction or interpretation of findings. Thus, it is of little value either for theory building or professional practice."

A separate issue that is unique in conducting evaluation on adult literacy programs is that nearly all of the standardized tests used are normed on children. The most common tests used in the field of adult literacy were designed for use with children with grade level equivalents being "extrapolated" for test result interpretation. Sticht (1990) describes the problems associated with using standardized tests that are normed on children. "Interpreting these grade level scores for adult learners is not straightforward. For instance, the score of 4.8 does not mean that an adult reads like the average child in the eighth month of the fourth grade....what the fourth grade level score means for adults is that the adult reads poorly compared to other adults who may score at the ninth, tenth, or twelfth grade levels on the test."

A related but separate problem in conducting adult literacy evaluation using standardized tests is that norming data is virtually nonexistent. Attempts to make comparisons across programs, geographic regions, or time is difficult if not impossible to do. The lack of standardization in administration of tests was pointed out by Sticht and also was an issue in the Technology for Literacy Project evaluation. When attempting to make comparisons with National Diffusion Network Literacy Projects, it became clear that no two had conducted their testing in the same way.

The concerns described with evaluation thus far are those unique to the field of adult literacy. The growing concern with standardized tests in general, the suspect use of grade level equivalents, and the use of tests as screening devices are larger issues than the scope of this paper. Suffice it to say that considerable support is lent to the claims of adult literacy providers that the tools for conducting accurate and appropriate evaluations in literacy programs simply haven't been developed yet. A BCEL article on "Standardized Tests," states "The growing concern of literacy service practitioners, theorists, and test designers, among others in the field, is sparking much debate and a hard look at just what standardized tests actually test and for what purposes, and whether the results tell us anything of real value, indeed whether they are not harmful."

Despite the reluctance of many literacy providers to openly embrace evaluation as it currently is conceived, evaluation is a growing portion of all literacy operations. First, as increased dollars are allocated to adult literacy instruction, funders want to know what they are getting for their money. Whether the resources are from the federal or state government, private foundation, or local business, the result is the same: how do we know funding this program has made a difference in literacy? Accountability is seen by many as the principle driving force behind the surge of interest in evaluating literacy projects. According to BCEL, "the Federal call for standardized assessment in ABE and ESL is objectionable to many; others take it as good news, as a sign that adult basic education is coming of age. Marginal affairs can get by without much scrutiny, they say, but demands for accountability always go with significant resource investment."

A second reason for conducting evaluation in adult literacy comes from the program needs themselves. Stockdill (1989) writes that accountability is only one of the many purposes of evaluation. In writing about the benefits of having an evaluation of the project Stockdill states, "From the process of collecting information, preliminary conclusions about the effectiveness of the project can be drawn and immediate actions can be taken. Project directors can identify both strengths and weaknesses and then address weaknesses and build on strengths."

As a literacy provider who was privileged to have access to a formative evaluator for a three year period, the project director can attest to the value of ongoing, systematic feedback on program operation. Initially it was uncomfortable to have a person who was not part of the staff sitting in

during difficult planning sessions for the Technology for Literacy Project. It seemed all too apparent that we didn't know what we were doing!

The realization of what a formative evaluator could do for program operation came early in the project. After approximately six weeks of operation it was clear that something was terribly wrong with our volunteer component. Complaints occurred daily with problem descriptions ranging from too many students, to too many volunteers, to students being at too high a level for the volunteers we had. The formative evaluator was asked to review the situation. In two weeks we received a two page summary of the status of our volunteer program with approximately 60 tutors and 60 students. During period reviewed, there were 47 scheduled appointments or "matches" but only 3 had actually occurred! Several recommendations accompanied the report and the project director was able to act on them immediately.

During the subsequent three year period of program operation staff availed themselves of the formative evaluator's services to the point that an evaluation process was used in some unexpected areas. When the cumulative data collected from quarterly questionnaires administered to staff, students, and volunteers indicated that everyone hated the computer chairs, the Project Director had no choice but to act on the information. Computer chairs were brought in "on approval" and were "evaluated" by staff, students, and volunteers on a form with Likert-type scales before the final recommendation for purchase was submitted to the purchasing department. When the purchasing department tried to recommend a chair from a different company, we flooded them with the data collection results!

The most important reason for conducting evaluation in literacy programs is that learners want to know how they are progressing. When asked on the initial intake form at Technology for Literacy Center, "what will keep you coming back to this program?", over 80% of the learners said, "that I know I'm making progress." A great deal has been written (Sticht (1990), LVA Evaluation (1990)) on the importance of separating learner assessment from program evaluation. However, at some point learners want to know, "how am I doing compared to others?" Individual assessment techniques, such as portfolios can only take us so far. Learners have a right to know what the odds are that they will be successful in the program they've entered. How many GED graduates are there? What is the retention rate? How many people got jobs as a result of the program? High School diplomas? Met their own personal goals? Learners need to be educated to ask these questions as part of a learner empowerment process. As consumers of literacy services, they have a right to know the viability of the program they have selected.

THE TECHNOLOGY FOR LITERACY PROJECT EVALUATION

Stockdill (1987) writes, "The Technology for Literacy Project evaluation plan was based upon the philosophical principle that evaluations should be useful." Since Dr. Michael Patton assumed the role of summative evaluator, it was only logical that his theoretical framework should be the guiding principle for the evaluation conducted. Namely, "the systematic collection of information about the activities, characteristics, and outcomes of programs for use by specific people to reduce uncertainties, improve effectiveness, and make decisions with regard to what those programs are doing and affecting (Patton, 1986). To achieve that end, decisions about evaluation and evaluation design were made at the outset and were an integral part of the planning process for the Technology for Literacy Project.

Dr. Stacey Stockdill was brought on during the planning phase as the formative evaluator and assisted in identifying the measures that would be used to ascertain whether project goals were being met and to design a document trail for evaluation data that could be examined by the summative evaluator. As the evaluation evolved it became apparent that funders were also interested in the costs associated with using technology in literacy efforts. A separate cost component was added to the evaluation design, and Dr. Darrell Lewis, added to the evaluation

team. This cost descriptive study describes the various cost components, collects detailed information regarding project costs, and suggests needed improvements in project design.

The Technology for Literacy Project was designed to serve adults whose basic skills in reading, writing, or math were below the high school completion level, with the primary focus on adults with reading an math skills below an eighth-grade level. It was designed to serve 300 students in its first year of operation, and 500 in each subsequent year, for a total of 1300 students over a three-year period. Enrollment in the project was 798 students in the first year of operation, and 909 adult learners in its second year of operation.

The purpose of the Technology for Literacy Project was to find a new and better way to teach literacy skills to adults using computers and other forms of technology. The mission of the project was to improve the literacy level of adults residing or working in the greater St. Paul area of Ramsey, Washington, and Dakota counties. The project had four major components:
Direct service--provide direct service to adults in need of basic skills instruction by establishing a demonstration model that incorporates an educational system using technology.
Training--train teachers, administrators, graduate students, and volunteers to incorporate technology in their programs.
Research--research the value and applicablility of technology in basic literacy instruction, and disseminate the results.
Incentive grants--stimulate the use of technology by providing incentive grants to existing literacy programs.

The evaluation questions addressed by the formative and summative evaluation follow, with the primary focus of the evaluation on the direct service questions:
Direct Service
* Recruitment--Is TLC attracting the target population?
* Achievement--Are TLC students making progress in reaching their goals?
* Retention--Is TLC retaining students?

Training
* How successful has TLC been in informing basic skills instructors on the use of technology and facilitating cooperative efforts among literacy providers to use computers?

Incentive Grants
*To what extent has TLC stimulated the use of technology in other literacy programs?

Research
*To what extent has TLC provided a laboratory for research on the use of technology with functionally illiterate adults?

In general
*What are the strengths of the TLC project? How can they be built upon?
*What are the weaknesses of the TLC project? How can they be addressed?

A number of data collection methods were identified to assess if students were making progress including: standardized achievement tests used with control and experimental groups, criterion-referenced tests to assess the degree to which learners mastered the materials studied, and qualitative methods such as focus group interviews, exit interviews, questionnaires, activity logs, and case studies.

Results of this project can be found in The Technology for Literacy Project Evaluation (Turner & Stockdill 1987), available through ERIC and at The Technology for Literacy Center. A videotape of the summative evaluation and overview of the project is also available. A third year evaluation which focuses on the training, incentive grant, and research components of the project is available through ERIC as well. A final, recent publication available through the St. Paul Foundation focuses on the transition of the project from joint ownership and partnership among foundations and school district to sole operation by the district. In addition several masters theses and graduate

research papers have made use of data collected through field-based research at the Technology for Literacy Center.

Although the findings were extremely positive, it is more important for the purpose of this paper to describe the implications for long term evaluation in literacy programs and link those back to the issues already identified as stumbling blocks in the process. Specific issues that were hotly debated among evaluators and program staff included the following:

Completion: What is the definition of "completion" in a literacy program? The easiest description is that of a learner securing a GED or High School Diploma. However, many learners drift in and out of programs, using the literacy resources to meet a critically felt need of the moment. For example, a learner may need assistance filling out a job application and then disappear for the next three months. Any evaluation which does not allow for this type of learner-drift does not reflect the contextual frame for literacy instruction. Evaluations that focus on completion and closure belie the complexity learners experience in an every expanding spiral of literacy demands in the community. Thus, completion becomes a difficult issue for evaluator and provider alike. When, exactly, is the person done?

Student: A closely related but separate issue is the definition of "student" or "learner." When attempting to establish comparable data for comparison, evaluators sought those literacy projects identified as National Diffusion Network (NDN) projects, knowing that there were established standards and criteria for the evaluations conducted. In follow-up telephone interviews to clarify contradictory results, it became evident that no two programs defined "student" the same way! Thus, all measures become suspect when there is no standardized definition of the independent variable, "student." The most frequently offered definition was that of a person attending for a minimum of 12 hours, which is that used by the U.S. Department of Education for reporting purposes in ABE and GED. The imperative to standardize terms is critical for any meaningful data to be collected across programs.

Retention: A similar case can be made for the term, "retention." Retention measures vary dramatically depending on the increment used. A comparative analysis of retention in different literacy programs showed that 100% retention can be achieved if the time measured is two weeks rather than a year!

Normal Curve: In TLC's summative evaluation, Patton (1987) writes that "Of the nine different gain scores shown...in only one case is the standard deviation less than the mean. Another indicator of great variability is the difference between the mean and the median. The conclusion he draws is that "statistics on variations and achievement in hours substantiate the highly individualized nature of TLC and the importance of not placing too much emphasis on average achievement scores or average hours of participation." In short, assumptions of normalcy must be challenged when addressing the "great variation and diversity in TLC." This conclusion is supported in the recent report prepared for the U.S. Department of Education by Dr. Thomas Sticht (1990). Dr. Sticht writes, "For adult basic education programs, in which there is generally precious little time for adults to participate, the 'skills' focus is recognized as not being sensitive to the particular content that is taught. To a large extent, that is why there is very little increase in the standardized test scores of most adult learners in the relatively brief time that they attend programs. The nationally standardized and normed tests are not sensitive enough to the specifics of what is being taught in the program. Among other reasons, this is why many programs are searching for alternatives to such standardized tests."

CONCLUSIONS AND IMPLICATIONS

The good news is that subsequent to the Technology for Literacy Evaluation, other large significantly funded evaluations have occurred, each of them adding to the body of knowledge, and

each of them stressing the need for better measures and realistic goals. The Houston Evaluation (1990), California study (CALPEP) (1989), and LVA assessment (1990), all have greatly increased our understanding of the issues and needs for adult literacy evaluation. Most recently the U.S. Department of Education has authorized a new four-year multi-million dollar project (NAEP) which will examine the current practices of literacy programs and ultimately develop tests that program planners can use for diagnostic and reporting purposes. A growing number of practitioners around the country are exploring alternative assessment techniques, such as portfolios, which will allow for totally individualized assessment. The ability to collect, tabulate, and generalize from widely differing assessment tools may be a viable option for the first time due to the computer. It remains to be seen if funding agents can accept the diversity of reporting structures and whether programs will accept the constraints that rigorous accountability demands. To the extent that evaluators with the U.S. Department of Education, private foundations, or the workplace, can adhere to Michael Patton's dictate that evaluation must be useful by helping to reduce uncertainties, improve effectiveness, and make decisions, literacy providers can be expected to openly embrace the opportunity evaluation represents.

REFERENCES

Darkenwald, G.G. (1986) Adult literacy education: A review of the research and priorities for future inquiry. Literacy Assistance Center. N.Y.

Freiberg, H.J. & Gauthier, L. & Stein, T. (1990) Assessment of the READ Commission learning center. Houston READ Commission, Unpublished report.

Literacy Volunteers of America. (1990). Evaluation Study of Program Effectiveness. Syracuse, NY.

Mikuleky, L. (1983) Research in adult literacy. Presentation at OERI. Washington, D.c.

National Evaluation of Adult Education Programs (1990, September).BULLETIN No. 1. U.S. Department of Education. Washington, D.C.

Patton, M.Q. (1986) Utilization Focused Evaluation. (2nd ed.). Beverly Hills, CA: Sage Publications.

Solorzano, R.W., & Stecher, B.M., & Perez, M. (1989) Reducing illiteracy in California: Review of Effective practices in Adult Literacy Programs. Educational Testing Service. Pasadena, CA.

Standardized Tests: Their Use and Misuse (1990, January). BCEL: Business Council for Effective Literacy, p.1.

Sticht, T. G. (1990). Testing and Assessment in Adult Basic Education and English as a Second language programs. Report to U.S. Department of Education. Washington, D.C.

Stockdill, S.H. (1988) Evaluation report regarding: the Technology for Literacy Project. St. Paul Foundation, St. Paul, MN.

Stockdill, S.H. (1989) & Stoehr, M. Evaluating foundation programs & projects. St. Paul Foundation. St. Paul, MN.

Turner, T. C. & Stockdill, S. H. (Eds.) (1987) The Technology for Literacy Project Evaluation . St. Paul Foundation, St. Paul, MN.